



Barry (John)

MEDICO-CHRISTIAN
EMBRYOLOGY,
OR
THE UNBORN CHILD,

(FROM THE EARLIEST PERIOD OF ITS EXISTENCE,)

CONSIDERED IN A MEDICAL, MORAL
AND RELIGIOUS POINT OF VIEW.

COMPRISING ALSO,

BRIEF PRACTICAL OBSERVATIONS ON THE REGIMEN OF THE
PREGNANT FEMALE, AND ON THE DISEASES WITH WHICH
SHE MAY BE ATTACKED.

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"In necessariis unitas, in dubiis
libertas, in omnibus caritas."

St. August.

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PREFACE.

THOUGH the following work was more particularly intended for the Medical Profession, yet as it contains much that should be known, and well known too, by married persons, heads of families, in a word, by all whose profession or calling brings them in connection with the teeming female or with the lying-in chamber, care has been taken that it should not contain anything that would be really offensive to the modesty of married ladies. For the *unmarried*, of either sex, the work is not designed, nor is it suitable.

The language has been rendered as popular, that is, as plain to the unprofessional, as the dignity of the subject and other circumstances would permit. But as some technical terms were in some cases unavoidable, a glossary giving the meaning of them has been appended.

CLAYVILLE, SHELBY Co., KY.,

J. B.

October 1st, 1846.

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MEDICO-CHRISTIAN EMBRYOLOGY.

CHAPTER I.

PRELIMINARY REMARKS.

By a considerable number of the Medical Profession, by men who wish to be true benefactors of our race, a work on Religious, or as some may choose to call it, Sacred Embryology, in English, has long been desired. We felt the necessity of it ourselves when entering on our professional career, and if we now presume to present our brethern with a monograph embracing the subject, it is because the desideratum cannot at present be supplied from any other source in our language.

At present we do not pretend to offer a complete treatise: the subject is very extensive and will leave much room for future inquirers. Our principal object has been to present our brethern with sound principles to guide them in their practice; to make known to them (especially to the junior members) what we believe them to be already generally unacquainted with. But we flatter ourselves that upon some of the subjects discussed in this work, we have been enabled to shed new and important light.

We ought continually to bear in mind the dignity, the heavenly character of our profession. Chosen to be the agent of Divine Providence to alleviate the miseries of his fellow-men, to assuage pain, inspire hope, prolong existence—to superintend, to a certain extent, their moral as well as their physical interests, how pure ought not to be the morals of the medical practitioner, how extensive his research, how enlightened and comprehensive his mind. His responsibility is great; his means of action on society—for evil or for good, give him a powerful influence; but if he do not correspond with the high expectations which are entertained of him, if he prove recreant to them, he becomes faithless, not only to his God, but also to himself, and far from being a blessing to society (and for

such he was originally destined) he becomes its curse and the instrument of his own moral degradation.

Nor should we forget that the matters we are called upon to decide are most frequently questions of life or death, the most sacred as well as the most important that can engage our attention, our most conscientious regards; and not unfrequently are we required to decide upon other questions equally interesting and important, which may involve the honor and happiness of the family as well as of the individual.

Is a profession noble, says Dr. Williams, in proportion to the breadth and depth and diversity of the knowledge upon which it is founded? Then, think of medicine; how she levies her contributions from every branch of knowledge. The human body exhibits a machinery so perfect that the most skillful mechanical philosopher may take lessons from studying it. It contains a laboratory so diversified, and chemical processes so subtle that therein the ability of the most expert chemist is far surpassed. But the knowledge of the student of medicine must go beyond that of the mechanical and chemical philosopher. He must study those vital properties of which they can tell him nothing. He must become acquainted with the attributes of life operating on matter But is the body the only object of his care? No, mind and matter are [in the human being] too closely combined to be studied or treated apart. To medicine alone it belongs to contemplate and to treat the *entire man—physical, moral, and intellectual.*”—(Principles of Medicine, p. 26.)

Our profession is of the most admirable character. Pain, sickness, danger, are the only requirements for its charitable action. It makes no distinction in religion; the believer and the unbeliever alike receive its advantages. It interferes not with politics nor with parties. The poor and the rich, the lowly and the noble, the bond and the free are alike embraced in its ministrations. Its benevolent regards attend man at every period from the “cradle to the grave:” ought it with less solicitude watch and protect him from the first dawn of existence, that is, from the moment of conception, and through the

whole course of his intra-uterine life? "Followed up in the true and christian spirit of gratitude towards God and love towards man, this noble profession is second only in usefulness to that of the servants of the church, and like it, when faithfully administered, it will assuredly become its own abundant reward." (*Watson's Lectures on the Practice of Physic.*)

In concluding these remarks we may be permitted to say that the materials for this work have been derived from several sources. But we are especially indebted to Dr. Rosiau and Professor Debreyne, from whose works on Embryology* we have fully drawn, having in many instances done little more than simply translated from them. Indeed, to acknowledge their contributions at every step in the form of quotations would give our book an awkward appearance and therefore we will content ourselves with this general acknowledgement. We shall abstain from speaking of the high character of these two writers, both as regards the scientific ability and sound theological views which characterize their works on Embryology. We shall only say, that they have been upon most subjects our principal guides, though we have been in a few cases constrained to differ from them, as will be seen in the course of the work. The sources whence other contributions have been received will be duly acknowledged as we proceed. But in justice to ourselves it may be right to mention that several chapters of the work are our own production, and that the parts borrowed from others have frequently received considerable additions from our pen.

EMBRYOLOGY is that branch of medical science which treats of the human embryo and fetus. In this work we will treat of them, not only in a medical, but also in a moral and religious point of view.

When we call to mind the high destinies that await the

* The monograph of Dr. Rosiau will be found in his *Medicine Populaire*, that of Professor Debreyne in his *Essai sur la Theologie Morale*.

embryo, that from the moment of conception it is endued with an immortal soul upon which is stamped the image of the divine Creator, that it was "created little inferior to the angels," that it is destined to act an important part in the duties and vocations of life, that, moreover, it is under certain conditions, destined for an eternity of unspeakable happiness, how great ought not to be our solicitude respecting it; how great especially ought not to be the solicitude of those persons who are more particularly connected with it, and who owe it certain duties. These duties we will endeavor to point out and enforce in the following chapters.

CHAPTER II.

OF CONCEPTION—PREGNANCY.

1. Our enquiry will naturally commence at the time when the rudimentary fetus is ushered into existence. We would feign pass over any allusion to this subject were it not that some knowledge of the various theories that have prevailed on this mysterious process have had more or less practical influence on the fate of the new being. These numerous theories, all of which are more or less hypothetical, may be reduced to the two following heads, viz: *Syngenesis* and *Evolution*. Two sub-divisions of the latter, viz: *Spermatism* and *Ovism* will alone deserve our attention in the present investigation.

2. The Spermatists considered that the sperm of the male alone contained the rudimentary elements of the new being, while the female afforded these only a receptacle and nourishment. This system was advocated by Galen, and revived again in the seventeenth century; its abettors have been called by the various names of *Seminists*, *Anamalculists*, *Spermatists*, &c.

3. The Ovists, on the contrary, held that the rudimentary embryo existed in the ovum of the female, the fecundating principle of the male semen (semen masculinum) only awak-

ening the formative powers lying dormant in the ovum. Such was the theory of Pythagoras and the same which, with little variation, was adopted by Aristotle. The philosophers who have adopted this view have been called *Ovarists*, *Ovists*, &c.

3. Both these hypotheses, as justly observed by Professor Dunglison, are rejected by modern physiologists as being too exclusive, and quite insufficient to account for many facts known in the history of procreation, such as the transmission of bodily and of mental likeness, and the production of hybrids among animals of different species. The improved physiology of the present day teaches that there must be a combination or union of the materials furnished by both parents. It is a general law throughout nature, as far as yet known, that the product of procreation partakes more or less of the character of both its parents, the mulatto produced from the Caucasian and the negro being a familiar example in the human species, and the mule among animals another. The application of these principles will hereafter be considered.

4. By pregnancy is understood the state of the woman after she has conceived. It is called *uterine* or *normal* pregnancy when it results in the development of one or more fetuses in the cavity of the uterus; *extra-uterine* or *abnormal* when the product of conception is developed exterior to that organ.

5. Uterine pregnancy is termed solitary, double, treble, &c., accordingly as the matrix may contain one, two, three, or a greater number of fetuses, and it may be complicated with a mole, hydatids, gaseous, or sanguinous collections, &c.

6. Extra-uterine pregnancies are divided into *tubal*, *ovarian*, and *abdominal*, to these another species called *interstitial* has lately been added. In the first the fetus is contained in one of the Fallopian tubes; in the second species, it is contained in one of the ovaries; in the third, in the cavity of the peritoneum; and in the fourth or interstitial, the fetus is found in the fibres of the uterine parietes. "Dr. Campbell has

added another variety which he calls *ovario-tubal*, a compound of the two first, when the sac containing the fetus is formed by the ovary and Fallopian tube jointly." (*Church-hill's System of Midwifery*.)

Normal and abnormal pregnancies may exist simultaneously and would constitute utero-tubal, utero-ovarian &c., pregnancies; but such forms must be expected to be extremely rare.

7. *Apparent pregnancy, false pregnancy, and afetal pregnancy* are names given to intumescences of the abdomen, produced by the development of moles, hydatids, polypi, &c., in the uterus, by the accumulation of blood, serosity, or gaseous fluids in that organ, or by its own irritation which, in some cases, produces the symptoms of a pregnancy which is denominated *nervous*.

SYMPTOMS AND SIGNS OF PREGNANCY.

8. Among the phenomena which announce the existence of pregnancy, some depend on the sympathetic action which the uterus exercises on various organs of the animal economy, and are called *rational signs*; others depend on the changes which take place in the womb and its associate organs, or in the motions of the fetus, and are called *sensible signs*.

9. The *rational signs* are: colics in the hypogastric region, languishing eyes surrounded with a blueish circle, redish spots on the face, a light swelling of the neck, a greater susceptibility of the temper which becomes irritable and capricious, languor of the intellectual faculties, the judgment less decisive, the imagination more fickle, the will more unbounded, suppression of the menstrual flux, disgusts, nausea, appetite more fantastical and depraved, tumefaction of the abdomen, &c.

All these signs are uncertain, as there is not one of them that may not belong to some pathological (diseased) affection; but the aggregate of them may serve to establish presumption sufficiently strong to induce the female and those connected

with her, to act as if the state of pregnancy were fully demonstrated.

10. The *sensible signs* deduced from the changes which take place in the womb, (and which are principally learned by the touch,) or resulting from the motions of the fetus, may alone dispel the uncertainty which will always remain after the observation of the phenomena enumerated in the last paragraph.

It is seldom until after the fourth month, that is to say, when the womb and the fetus it contains, acquire some volume, that the sensible signs become manifest. The details may be seen in works on midwifery. We will only add that by auscultation applied to the pubic region or the hypogastric, the palpitations or jerkings of the fetal heart may be heard,—palpitations which are not isochronous (performed at the same time) with those of the mother's pulse, and from which they may be easily distinguished. Other less certain signs will be found enumerated in treatises on midwifery.

CHAPTER III.

ANIMATION OF THE EMBRYO OR FETUS.

11. It will be easily conceived that the clear understanding of this matter is of the greatest importance. On the correctness of it will depend many of the duties which will be insisted on in the course of this work. We hope to be enabled to present such a view of it as will satisfy the most incredulous—a view, not the production of the imagination nor of prejudice, but one verified by experience and in accordance with the observations made in anatomy, and deduced from the improved state of physiology.

12. Both ancient and modern philosophers have advanced many hypotheses more or less ingenious, and all equally fragile, in order to determine the moment of the animation of the fetus. Some have taught that the bodies and souls are the effect of a simultaneous creation in the first man. According to these the ovaries of the first woman contained ova inclosing in *petit*

not only all the children to whom she was to give birth, but also the whole race of mankind, to the extinction of the species. Such is the system of *encasing of germs*, called by the French *emboitement des germes*.

13. Others have contended that the soul exists prior to the body, and others again, that the body exists prior to the soul, This latter doctrine has had many partisans, and Aristotle, who was the first to teach it, thinking that the animation was so much the more precious, the sooner and the more completely the fetus was organized, fixed the period at the fortieth day for the male, and a period somewhat later for the female fetus: until then, according to this philosopher, the fetus enjoys only a vegetative life, and ought to be considered as a plant. St. Augustine and most of the theologians who followed St. Thomas Aquinas adopted the opinion of Aristotle, and this was the one most in vogue in the schools until towards the end of the seventeenth century.*

The "vegetative life" of Aristotle (obscure as it is) can surely mean only the mode of existence of the fetus, not that it is at any period a vegetable, for as well may it be said that it becomes successively a fish, a worm, a frog, a quadruped, &c. its mode of existence being like that of each of these animals in certain periods of its developement. But shall this circumstance be sufficient to annihilate the personal identity, the humanity of the young being, the *myself*, (the *moi* of the French.) How many a human life has been sacrificed both corporally and spiritually, in consequence of the misapplication of this unintelligible term "vegetative life." (See sec. 92.)

Upon the mysterious principle, or rather, perhaps, assem-

* It may not be irrelevant to remark that the Doctors of the Church, in matters concerning the corporal life of man, followed the lights presented by medicine and philosophy. If, therefore, they should have erred with regard to the precise time when the fetus becomes animated, the fault is to be attributed to the imperfect state of those sciences, not to any defects in the teachings of the Church. She, as "the pillar and the ground of truth" only guarantees the soundness of faith and doctrine: after teaching the efficacy and the necessity of infant baptism, and the manner of administering it, she leaves its accomplishment to the care of man, but remains silent as to some of the different circumstances under which it is to be administered.

blage of functions, called Life, two opposite opinions are held by physiologists—one class maintaining that organization precedes life; the other, that life is a simple principle, and that it precedes the organization. We do not consider either opinion as exclusively correct, and only a little reflection and unbiassed judgment would suffice to convince the mind of their fallacy. A weighty objection against the view which presupposes organization is, how the organization itself, with its symmetrical and harmonious disposition of parts and transmission of likenesses takes place independent of life. It is true the advocates of this system admit that the molecules possess *vital* properties, but what is this but an admission in other words of the principle contended for by their opponents. To the opinion which makes life precede organization, it may be justly objected that we cannot conceive of life being present without a subject, that is, without organization. In this state of the question we may be permitted to offer an opinion which we do not consider exposed to either of the objections stated or to any other of a solid character; it is this: that *life and organization are simultaneous*, the one not preceding nor succeeding the other. This view we think is entitled to consideration from its simplicity and from its utility for all practical purposes whether physiological or psychological.

If the preceding observations be correct, it will follow that the embryo is animated or alive from the moment of conception; it will also follow that the human embryo is endowed with a living and immortal soul; for, according to St. Augustine, the soul is the life of the body, as God is the life of the soul: *vivit enim corpus meum de anima mea, et vivit anima mea de te*.* This soul is not dependent on organization for its existence, (though in our present state for its manifestation,) as it will survive the wreck of the mortal frame; but Aristotle would give the fetus a soul only about the fortieth day, and why then? because its body becomes more clearly developed, that is, it has more of the human form. Is not this evidently

* See the above maxim sustained in the *Precis de Physiologie Humaine* par P. F. C. Debreyne, pa. 11.

making the soul dependent on organization? Is there any evidence that a new principle is infused into the young being at this period, or is the unproved *ipse dixit* of the heathen philosopher to be received as conclusive.

14. St. Basil did not wish that a distinction should be made between the animate and inanimate fetus, because he considered that the soul was created just at the moment of conception. Zaccarias, Dr. Debreyne, and Dr. Rosiau, and indeed, all distinguished modern physiologists have concurred in this opinion. It is no more difficult for God to create the body and the soul simultaneously, than to create one after the other; and although we cannot perceive in the human ovum, traces of organization for a little time after conception, it appears to us that we should not thence conclude that a homoncule does not exist in it. It is not repugnant to our understanding to admit that at the moment of conception the liquid molecules destined to form the new being, do aggregate in such a manner as to constitute a body which does not become sensible to us, until by nutrition it has acquired some consistence. Neither is it repugnant to admit the immediate animation of the new liquid or gelatinous body.

"If the life of man," says M. Debreyne, "ceases immediately on the separation of the soul and the body, we may believe that it commences as soon as the soul becomes united to the body, whatever may be the smallness or rudimentary form of the latter. Now, as soon as the ovum is fecundated—a result which takes place as soon as the generative act is completed, it grows; it does not grow but because it is animated, then the germ or ovum becomes animated at the very moment of conception."

Moreover, is it not known that the soul remains united to the body to the last breath of the dying man, even when almost all the organs are struck with paralysis and death? Is this feeble spark, this poor remnant of material life which is going to be extinguished in a few minutes, is this, we would ask, a vitality superior to that of the fecundated embryo? Is not the latter at least a formative, plastic, growing life? And our reason must not be astonished at the unformed and small state in which

this feeble portion of animated matter appears to us. You see no organs in the shapeless germ of a hen's-egg; take a microscope and immediately you will see the lineaments of organization. The material smallness of the human germ should not astonish our obscured reason. God is always great and infinite in small as well as in large things, or rather in the material order there is in His eyes nothing small, nothing great: these relative qualities of greatness and smallness are the creation of the weakness of the human mind—necessary here below to establish a connexion between us and the material world, to appreciate its order and harmony. (Sec. 59.)

Our views are also supported by Valentini, who says it is probable that the fetus is animated immediately after conception. He adds, that consequently we should, under pain of mortal sin, baptise the germ or embryo when even it is no larger than a grain of barley, and when it would not present any sign of life, provided it was not putrified or evidently dead, and the reason he gives, is, that he believes the embryo to be alive, that is, united with a rational soul. "Celebrated theologians and learned physicians received his work with marked approbation. The faculties of theology of Paris, of Vienna, and of Prague, approved of his sentiments; that of Paris declared the doctrine of Valentini unquestionable, *indubitata doctrina*, that it is useful to prevent the abortions which irreligious women procure in themselves, without scruple, under the pretext that the new being is not yet animated. This doctrine received equally the approval of the Rectors of the University of Rheims and of the University of Salamanca, of several bishops and of the medical faculties of Vienna and Prague." (*Cangiamila.*)

15. The theory of animation being subsequent to the formation of the body, leads to serious inconveniences. How many mothers persuaded that the embryo is not alive for one or more months after conception, render themselves guilty of feticide or murder of the fetus, and in committing this horrible crime, have deprived their offspring of spiriutal* as well as

* See note in Section 91.

corporal life! and how many physicians and accouchers imbued with this mischievous doctrine, have favored them in their culpable attempts, or have deprived of baptism abortions capable of receiving it.

CHAPTER IV.

INFLUENCE OF THE MOTHER'S MIND ON THE EMBRYO OR FETUS.

16. THIS question has been warmly, and even indeed intemperately discussed by philosophers, physiologists and obstetricians, some attributing almost every deformity of the child, mother's mark, and monstrosity, to the excited mind or imagination, or the emotions, or the passions of the mother; while others stoutly denied that the mind had any agency in their production, but attributed them solely to confusion of germs, arrest of development; vices of conformation, disease of the embryo, &c. As we purpose examining this question at some length, it may be convenient, in order to avoid circumlocution, to call the former class *mentists*,* the latter, *anti-mentists*.

17. The mentists, or those who maintained the influence of the maternal mind, founding, as they considered, their system on facts, have furnished innumerable cases in its support, and it must be acknowledged that many of these are unanswerable on any other hypothesis. It is however to be regretted that these writers have not always observed due criticism in the selection of their cases, and therefore have brought unmerited obloquy on the system they wished to maintain. It is probable they attributed these cases too exclusively to the imagination of the mother. The consequence was, that their opponents

* Imaginationists would appear to answer, but then it is not certain that it is the imagination exclusively, rather than some other faculty or power of the mind, that is supposed to be concerned: until this point is determined, we had perhaps better say the mind itself. The term which we have chosen is derived from the Latin *mens*, which signifies the mind.

showed that similar phenomena are observed with regard to animals which cannot be supposed to possess that faculty, but in little, if in any degree. This system, which almost universally prevailed in former times, fell into disrepute in the latter part of the last and beginning of the present century; but it appears to revive again at the present time, counting among its advocates Dr. Carpenter, perhaps the most distinguished physiologist of the day, and the eminent names of Dr. A. Combe, and, we believe, of Drs. Blundell and Montgomery. Without entering into all the views of its friends, we shall hereafter demonstrate that the maternal mind has sometimes a positive and direct influence on the young being.

18. That the other class, or anti-mentists, are sometimes right in their views, it seems fair to us to allow. We can see no valid objection against the opinion that violent succussions of the body, as falls, blows, &c., may produce confusion of germs, and thus monstrosity; that the navel-string getting around a member may arrest its nutrition, and produce hypertrophy of another member; that organic disease of the fetus may arrest its development, &c. The different hypotheses, which exclude the participation of the maternal mind, count among their abettors many distinguished physiologists, particularly Geoffroi St. Hilaire and Professor Dunglison, and we were not a little surprised to find among them Dr. Rosiau, whom we have so frequently quoted; nay, Professor Debreyne may also be considered as belonging rather to this class.* We do not ourselves favor either party exclusively, but we feel satisfied that the mentists are oftener right than their opponents.

19. Practical men cannot be too careful in guarding against exclusive systems: they have been the bane of the profession. At one time all is humoralism, at another solidism; again, all

* We find the following remarks in his work entitled *Precis de Physeologie Humaine*. "*Les naturalistes ont longuement et sagement disserte sur la question des monstruosites. Cette matiere, il est vrai, pique toujours la curiosite du vulgaire, qui ont ordinairement cherche dans les monstres quelque crise d'extraordinaire, de sinistre et d'affreux; mais ce qui est reellement a notre objet se reduit a peu de chose. Les monstruosites sont des vices de conformation par exces ou par defaut.*"

is materialism, at another, a kind of spiritualism : vitalism at one time sways the sceptre, but only to be supplanted for a time by the blind forces or attraction of brute matter. Thus men are prone to run from one extreme into another, never apparently calling to mind the maxim : *In medio tutissimus ibis.*

Now, the whole of these contending parties in physiology, as well as pathology, may be reconciled by reflecting what is the nature of man. It will not be much doubted that he is a being composed of spirit and matter, or of a mind and body, both of which reciprocally act and react upon each other; that the body is again composed of solids and fluids. The most recent and accurate pathology has ascertained that disease commences primarily in the fluids, as well as in the solids. To these, in our opinion, may be added a third class, composed of the other two. Again, many diseases commence primarily in the body, more again in the mind, and another class may undoubtedly be formed from those produced by the mutual action and reaction of both. So it may be, in our opinion, with the subject more particularly under consideration : we think there is good reason to attribute most monstrosities, or *lusus naturæ*, mothers' marks, &c., to the *combined influence of the maternal mind and physical causes.*

Though many arguments may be adduced in its favor, we will, unlike most writers who propose new views, leave this offspring of our brain to itself, and proceed to show that the mind of the mother has a positive influence on the bodily form of the young being. The cases on record, proving this influence, are innumerable. We shall select only a few.

20. Dr. Dunglison, who, as we have already stated, is an anti-mentist, thus speaks : "Cases have occurred in which the mother, when a few months advanced in pregnancy, has been shocked by the sight of a person who has lost his hand, and the child has been born devoid of a hand. A young female, a few months gone with child, assisted a brother in one of the hospitals of London, who was wounded in the side. His condition affected her extremely. Her child was born with a deep pit, precisely in the same part that was wounded in the brother,"*

21. Malebranche records the following strange case: "About seven or eight years ago, there was to be seen at the hospital of *Incurables*, a young man who was born an idiot, and with his body broken in the same places that criminals have them, who are put on the rack. He has lived nearly twenty years in that state: many persons have seen him, and the late mother-queen having gone to visit that hospital, indulged her curiosity in going to see him, and even to feel his limbs in the places where they were broken."* Boerhaave, alluding to this case, or to one similar, says, that the mother of the young man, being with child, saw the malefactor broken upon the wheel.†

22. The same author (Boerhaave) further says: "I saw with mine own eyes, in a very wise lady of the first rank, that a mulberry falling upon her nose from off the tree under which she was walking, immediately the figure of the unlucky berry was painted upon the nose of the embryo, perfectly expressed in magnitude, color and roughness, with small round portions and velle; and *this impression returns and appears vivid, every year when the mulberries are ripe.*"‡

23. We will cite one case more from him, which should serve pregnant women as a caution to avoid being present at frightful spectacles. He informs us that when Count Egmond was beheaded at Brussels, "among the spectators was a woman with child, who, not without terror, saw the famous warrior perish; but this woman was afterwards delivered of an infant without a head, the neck being as yet bloody; the wonderful history of which came to Helmont (who lived at Brussels) confirmed by the public magistrate."

24. The anti-mentists considered they gained a great point, in maintaining that they could not conceive how the mind of the mother could exercise any influence on the bodily form of the new being, there being no very direct communication between both. True, the manner in which it acts cannot, in the present state of our knowledge, be explained. But is it philosophical or just, to deny effects, because we cannot explain how the causes produce them. If we be constrained to show how most of the functions of the animal body are performed, we shall be forced to deny the existence of many of

* *Becherche de la verite.*

† Boerhaave's *Lectures*, vol. V.

‡ The above observation, in *Italics*, is true of many cases of *nævi*, and appears to us to be entirely inexplicable on the principles of the anti-mentists.

them altogether. We know, for instance, that certain emotions produce blushing, but can we tell how or why the blood, in such cases, mounts up to the cheek, rather than to some other part? In like manner, if we can show that effects are produced on the offspring through or by the mind of the mother, though we cannot explain in what manner, the fact itself must be admitted. Shall we have the vanity to imagine that we are acquainted with all the laws of nature?

25. "We have demonstrative evidence," writes Dr. A. Combe, "that a fit of passion in a nurse vitiates the quality of the milk to such a degree as to cause colic and indigestion* in the suckling infant. If in the child already born, and in so far independent of its parent, the relation of the two is thus strong, is it unreasonable to suppose that it should yet be stronger when the infant lies in the mother's womb, is nourished indirectly by its mother's blood, and is to all intents and purposes a part of her own body. . . . Facts and reason then alike demonstrate the reality of the influence, and much practical advantage would result to both parent and child, were the conditions and extent of its operations better understood." (On the Management of Infancy.)

26. The same author places this subject in the clearest light, by quoting from Baron Percy the following facts, which occurred after the siege of Landau in 1793. "In addition to a violent cannonading, which kept the women in a constant state of alarm, the arsenal blew up with a terrific explosion, which few could hear with unshaken nerves. Out of ninety-two children born in that district within a few months afterwards, sixteen died at the instant of birth; thirty-three languished from eight to ten months, and then died; eight became *idiotic*, and died before the age of five years; and two came into the world with *numerous fractures*. Here then in a total of fifty-nine children, out of ninety-two, or within a trifle of two out of every three, actually killed through the medium of the mother's alarm, and the natural consequences upon her

* We lately witnessed a case where convulsions and death were soon produced in an infant, in consequence of the mother, Mrs. D., having been scared by the sudden yelling of five or six hounds in the yard. It was about the fifth day after her confinement. She suffered herself from great nervous derangement, and one of the lower limbs became paralyzed; she however soon recovered from these affections. But the child, who was in perfect health, sickened soon after being suckled,—the next day it had convulsions, and died the day following. Had the milk been thrown away until the mother got over the agitation, there can be no doubt that the child would have lived.

own organization,—an experiment (for such it is to the physiologist,) upon too large a scale, for the results to be set down as mere coincidences.”

27. Dr. Carpenter enters into these views. We quote from his *Physiology* the following note: “For some valuable observations on this subject, (the maternal influence on the fetus,) see Montgomery on the signs of pregnancy. Numerous cases have been recorded within the last few years, (especially in the *Lancet* and *Provincial Journal*,) in which malformations in the infant appeared distinctly traceable to strong impressions made on the mind of the mother, some months previously to parturition, these impressions having been persistent during the remaining period of pregnancy, and giving rise to a full expectation on the part of the mother that the child would be affected in the particular manner which actually occurred.”

28. We receive these views the more willingly, because of their practical good effects on both the mother and her infant. Dr. Hooper, upon this subject, remarks: “Such opinions, it is reasonable to believe, were allowed to pass current, in order to protect pregnant women from all hazardous and disagreeable occupations, to screen them from severe labor, and to procure for them a greater share of indulgence and tenderness than could be granted them in the common occurrences of life. The laws and customs of every civilized nation have, in some degree, established a persuasion that there was something sacred in the person of a pregnant woman.” In receiving the opinions of the anti-mentists exclusively, we would be left almost without any resource. Because what can we do to prevent the “perverted force of formation,” vices of conformation, &c.? Verily, neither science nor reason points out any course to avoid them.

29. In a work of this kind, discussions should have a practical bearing. Now, if our observations be correct, it will follow that the pregnant female ought to avoid not only whatever may agitate the mind, but also all severe bodily exercise or labor, and that her *longings*, in diet and drink, should be indulged to a reasonable extent. Moreover, she ought to be instructed, in case of great mental commotion from strong impressions, made by the sight of frightful animals or objects, or in case of “longing,” to pinch herself strongly on the thighs,

or, as recommended by Malebranche, to tickle herself in such parts as she would have the mark on, in case it were to take place. The object of this is to invite the nervous fluid or influence and blood to those parts, and consequently the deformity or mark. We would especially caution her against putting her hands to her face or head, while under the influence of the emotion. But to guard both herself and her child the more securely, we would recommend for her perusal and practice the rules which she will find in our chapter on *the Regimen of Pregnant Females*.

30. We think we have, in the preceding paragraphs, proved the influence of the mother's mind on the bodily conformation of the child. We could also show that the same influence extends likewise to its moral and intellectual character or constitution, but the limits we have prescribed to ourselves will not permit our entering upon the details at present. Should the profession call for another edition of our work, this, with some other interesting topics which we are obliged to leave unnoticed, will be considered.

CHAPTER V.

GROWTH AND PECULIARITIES OF THE EMBRYO.

31. In the human species the name of *ovum*, which signifies an egg, is given to the membraneous envelope or covering which incloses the new being, and the liquid which surrounds it, or in which it swims. The young being is called an *embryo* from the moment of fecundation until its body is sufficiently developed and presents the general outlines of an infant; it then is called a *fetus*, until the period of birth, after which it receives the name of *infant*. The name *fetus*, is commonly used to embrace that of *embryo*. We shall sometimes use the word *child* for these different states.

32. The embryo at first resembles a small gelatinous (jelly-like) mass, oblong, swelled about the middle, obtuse at one extremity, and terminated by a blunt point at the other. This

whitish semi-transparent mass, almost without consistence, is entirely soluble, that is, capable of being dissolved in water. About the fifth day after conception, it is said to be seen about the size of a pin's head. Fifteen or twenty days after conception, we begin to distinguish the head and the most prominent parts of the face; the eyes are seen, like two small black points; two small holes indicate the situation of the ears, and the nose presents itself under the form of a projecting or salient line.

At the end of a month, the volume of the embryo is equal to that of a large ant. But towards its anterior part it presents one extremity large and the other very small; the former, which is the head, forms almost half the volume of the child. The inferior extremity of the vertebral column or back, is observed, like a tail bent forwards and upwards. The arms and legs, feet and hands, are apparent, and towards the sixth week, the toes and fingers are recognizable; the sexual organs become visible, and the total size equals that of a wasp.

At the end of two months, the child has a length of two inches. Osseous or bony points are observed in the collar-bones, (clavicles) and in the long bones of the extremities or limbs. The umbilical cord (navel-string) is very visible. At three months, the length of the child is three inches and a half, and the weight about three ounces; it performs visible movements; all the exterior parts are formed and distinct. The continuation of this subject will be found in works on Physiology and Obstetrics, to which it more appropriately belongs.

CHAPTER VI.

EXTRA-UTERINE PREGNANCY.

33. Of the four species of extra-uterine pregnancies, or those which take place external to the cavity of the womb, (§ 4 and 6.) the tubal is the most frequent. It takes place in one of the Fallopian tubes; these tubes are membraneous conduits, which arise from the lateral angles of the womb, and float

in the cavity of the abdomen; by their open and fringed extremities they embrace the *ovaries* at the time of impregnation, and serve as conductors to the fecundating principle and to the young being which descends by one of them to the uterine cavity.

This kind of pregnancy takes place when the ovum, detached from the ovary and descending to the womb, is detained by any cause whatever in the tube, and there becomes developed.

31. Abdominal pregnancy, next after the tubal, is most frequent. In this case the ovum detached from the ovary is not seized by the tube, but falling into the abdominal cavity, contracts adhesions there, and becomes developed. It becomes surrounded with a crust or membranous bag which performs for it the office of a womb.

35. Ovarian pregnancy is that in which the child is developed in the ovary, that is, in the place where impregnation is effected. The ovaries (egg-bags) are two whitish bodies, about the size of a pigeon's egg, suspended in the *broad ligaments* about the distance of an inch from the womb behind, and a little below the Fallopian tubes; they are composed of small vesicles, which by most physiologists are considered as a kind of eggs, which are technically called ova and ovula.

36. In the interstitial species the child is found among the fibres of the womb itself. Cases of this kind must be extremely rare.

37. In all these species of extraordinary pregnancy, the child may come to its usual state of maturity. At a period, more or less advanced of these kinds of pregnancy, the sac containing the child, not admitting of further dilatation, becomes the seat of acute pains, and throes, like those of natural labor, are experienced. A further pang more acute than any of the preceding is terminated by a sensation of tearing internally; but this is succeeded by a perfect calm.

48. More frequently, an internal hemorrhage or bleeding takes place; the woman becomes pale and sinks. In more favorable cases, the child having fallen into the cavity of the peritoneum, contracts adhesions there, and may remain with impunity during twenty, or even fifty years.

39. Sometimes also, after a lapse of time more or less long, the presence of the child in the abdominal cavity excites an inflammation in the surrounding parts, and the female falls a victim to the violence of the inflammation. Finally, in some cases, the young child having contracted adhesions with some of the organs of the abdomen, causes abscesses there, which open into the bowels, into the bladder, or through the lower part of the abdomen and other parts, and the remains of the child have been found issuing by one or other of these openings, either naturally, or artificially by a surgical operation.

40. *Signs.* The signs of the presence of the child in the Fallopian tube, in the ovary, or in the cavity of the abdomen, are difficult enough to be recognized, and are often insufficient to determine a correct diagnosis. The rational signs are not different from those which accompany ordinary or normal pregnancy. The touch demonstrating that the womb has not acquired a volume proportional to the size of the tumor which is felt through the abdominal parietes, may furnish positive evidence in regard to the matter. *Ballotement* cannot be executed in these cases. The woman feels the movements of the child after the fourth month; and towards the sixth, the neck of the womb, in place of becoming soft and effaced, presents no alteration. In pregnancies of this kind, the stethoscope may be used with great advantage. By applying it to the tumor, we hear the beatings of the child's heart, which are not isochronous (uniform in time) with those of the arterial pulsations of the mother.

41. *Treatment.* What ought to be the conduct of the practitioner, when extra-uterine pregnancy is well recognized? Shall it be limited to *expectant* measures, in order to avoid the dangers attached to an operation, dangerous no doubt for the mother, but which is not necessarily mortal? Shall he leave the cyst or sac to be ruptured spontaneously, which is not always without danger to the woman, and which is always fatal to the child, whilst the latter may be saved by an operation?

The practitioner ought, during the pregnancy, to combat the accident by rational means, and prevail on himself to conduct it to the complete organization of the child. If at this epoch,

or before it, acute pains supervene, it becomes necessary to operate immediately, and before proceeding to open the abdomen, see if it be not possible to perform the operation on one of the parietes of the pelvis, which would be more advantageous for the flowing of the blood and the escape of pus, which would require an exit. The child having been extracted, the separation of the placenta should be left to nature, because a sudden separation of it, may cause a hemorrhage that may prove mortal.

42. On this subject, Professor Debreyne thus speaks: "In a christian point of view, the extra-uterine fetus ought to be considered as an intra-uterine fetus which an excessive narrowness or contraction of the pelvis prevents from being born through the natural passages, with this difference, however, that the Cæsarian operation becomes more necessary in the case of extra-uterine pregnancy, because in the latter baptism may be administered by opening the neck of the womb."

43. As to the physical danger of the operation, in this species, thus speaks Professor Velpeau: "With the operation (Cæsarian) the death (of the mother) is only probable; but without the operation it is nearly certain." The *Medical News*, for November, 1845, contains the following article: "Professor McCulloch, of Montreal, records, in the *British American Journal*, a case of extra-uterine fetation (pregnancy) in which the child was removed by the Cæsarian operation, and the mother recovered." (See Cæsarian operation.)

CHAPTER VII.

ABORTION—MISCARRIAGE.

44. ABORTION is the expulsion of the child from the womb, before the ordinary period of labor. In a medico-religious point of view, two species are necessary to be distinguished, one voluntary, the other involuntary.

1. OF INVOLUNTARY ABORTION.

45. The causes of abortions are numerous; some are predisposing, others exciting causes. But between these two orders the limits are not so far separated that the causes which predispose to abortion may not likewise excite it, if they act with force and in a continuous manner.

46. *Predisposing causes*:—A nervous temperament, a high degree of sensibility, general or local plethora, extreme weakness, residence in low, humid, and marshy places, sojourning in hospitals badly ventilated and crowded with patients, unhealthy emanations, compression of the abdomen from light clothing, especially from stiff and unyielding stays, high-heeled shoes which render difficult the equilibrium of the body and expose to succussion or falls, bleedings especially from the feet, aliments too juicy and capable of producing plethora, enticing meats, (*ragouts*) dark meats, spirituous liquors, debilitating regimen, severe antiphlogestic diet, fasting, prolonged night watching, diarrhea, constipation, leucorrhea, anger, joy, abuse of the marriage act especially in the first months of pregnancy, and at the time which corresponds with the periodical return of the menses (monthly sickness,) former abortions.

47. The *exciting causes* are: the sudden impression of cold and piercing air, immersion in cold water, blows on the abdomen or on the region of the pelvis, falls on those parts, fevers, emetics, acrid purgative medicine, irritating injections, medicines capable of exciting the sexual organs, or which have the power of determining the blood to them and re-establishing the "courses," the commotion occasioned by dancing, especially waltzing, active riding on horseback, strong efforts, the succussion of badly suspended carriages, raising up of the arms to elevate even light burdens, or to reach for something too high, surprise, the announcement of unexpected or afflicting news, &c.

48. "Probably," says Dr. Debreyne, "the most frequent exciting cause of abortion is excess and irregularity in the mar-

riage act. The celebrated accouchuer Levret attributed to this the greater portion of abortions, the causes of which could not be otherwise determined. Zimmerman, Gardien, Murat, Durgès, &c., have also regarded this act as a frequent cause of abortion."

49. Mezler, a German physician, thus writes: "The most savage nations dispense with their pregnant women from hard work. The European alone, in country places, seems to be ignorant of the attention which nature itself seems to indicate. It is inconceivable how many abortions are produced by this abuse, how much it augments the number of still born children, how much, in a word, it, in some countries, influences conjugal sterility. If, in consequence of these employments thus exacted, the woman comes by an accident, the magistrate pities her, the curate reprimands her; but nobody thinks of instructing the country people in their duties—in their veritable interests."

50. "Another woman," says the same writer, "informed me, that being one day engaged in threshing corn, she felt that something broke within her and came away through the genital parts. Not knowing what it could be, and fearing the raileries of the peasants who worked with her, she trod on it, in order to crush it, and perceived by the resistance she felt that it was a solid body. Will not the recital of this produce horror? And still, homicides of this kind are frequently repeated without any person trying to prevent them, and I see every day, pregnant women at the most laborious employments."

51. To recapitulate: it will be seen that all the means capable of increasing the afflux of blood towards the womb, every cause of perturbation or irritation directed towards that organ and the neighboring parts; in fine, all substances which notably accelerate the circulation of the blood, especially such as are calculated to produce uterine congestion or plethora, may cause abortion. There are no medicines, says Dr. Marc, a celebrated medical jurist, which can determine abortion, and nothing but abortion,—in a direct and specific manner. Nature, on the contrary, which seems designedly to have refused them this power, has raised obstacles, dangers, and incertitude

against every attempt to destroy or expel the young being, interesting from its weakness, which is inclosed in the maternal womb. If these criminal attempts have been sometimes seen to succeed, they are more frequently seen to fail. In every case, it cannot be too frequently repeated: wo to the mother who exposes herself to such a trial! Not only does her life run the greatest danger, but her health always receives an injury which it is difficult and almost always impossible to efface.

52. Besides these causes, there are others which depend on the morbid state of the womb, such as rigidity of fibre, atony, scirrhus or cancer of the uterus; others respect the child and its envelopes, as disease or death of the young being, rupture of the navel string, callosities or ossification of the placenta, insertion of the placenta on the neck of the womb, extreme delicacy or tenuity of the membranes, too small a quantity of liquor in the amnios.

53. *Signs of Abortion.*—Pains in the loins and in the hypogastrium, which should lead to suspicion if they terminate at the vulva or the anus, uterine hemorrhage more or less considerable, flaccidity of the breasts, disappearance of the abdominal tumor, absence of the movements of the child, feeling of weight in the pelvis, frequent desire to urinate, &c.

54. *Treatment.*—This consists in removing the causes; the sick woman is to be placed on her back in a bed neither too warm nor too soft; a matress or cushion stuffed with oat-chaff or something of the same character, is to be placed under her breech so that it may be raised as high as the chest, if not higher; great tranquility of mind and body is recommendable. If there be general plethora, bleeding is to be employed. In case of local plethora fifteen or twenty leeches are to be applied to the hypogastrium or above the pubis; if there be costiveness, emollient injections or laxatives are to be resorted to; should there be diarrhea or dysentery leeches are to be applied as already recommended; and emollient injections, such as an infusion of marsh-mallows or of flax-seed, or a solution of starch are to be administered, and the patient should be enjoined to retain them as long as possible. In cases where the

nerves are much excited anodyne potions composed of water of orange flowers, and sulphuric ether, have been highly recommended.

In almost all cases bleeding is proper; excessive weakness could alone contra-indicate it. Acidulated drinks, such as lemonade, (if the patient should not have been troubled with a catarrhal cough,) barley water, &c., are advantageous.

55. Often when these means are resorted to in time, the accident is arrested and the abortion prevented. But if the causes of abortion depend on lesions of the womb, or if they depend on the fetus and its connexions or dependencies, it is often impossible to prevent the miscarriage. Professor Miller, of Louisville, states that after regular parturient contractions are established it cannot be arrested.

56. Every time we are called too late, every time the causes of abortion cannot be removed, the expulsion of the child and of the after-birth, should be left to nature as in a natural labor. If accidents or complications occur they must be remedied according to circumstances, but in this case the presence of an accoucheur or of a well-instructed midwife becomes necessary. (See sec. 70.)

2. OF VOLUNTARY ABORTION.

57. VOLUNTARY abortion is the result of interferences or procedures resorted to with the intention of provoking expulsion of the child before the time marked by nature. When produced with a culpable intention it is called *feticide*—a crime which differs from infanticide only in this, that the latter is the murder of a new-born infant, whilst the former is murder of the child before birth.

CRIME OF VOLUNTARY ABORTION.

58. At all times the use of agents capable of producing miscarriage has been regarded as criminal; the effects of these

agents being at the same time known, and Ovid himself, whose morality was not above suspicion, says that the first who taught the art of producing abortion deserved perdition for his wickedness—

“Quæ prima instituit teneros avellere fœtus.
“Malitia fuerat digna perere sua.”

Nevertheless, abortions although condemned by morality, philosophy, and religion, were very common among the ancients as they are unfortunately in our own times, and they are met with among all classes of society.

59. If infanticide (sec. 57) inspire horror in most women, it is very common to find among them less repugnance to feticide, which as we have already shown, is the result of voluntary abortion. This diversity of sentiment most commonly comes from the erroneous opinion that the embryo which they bear is not yet alive or animated. But of what importance is it, whether in the first moments of conception the soul is united to the embryo or not? *Homo est qui futurus est.*

Besides, we have already shown that animation takes place at the very moment of conception, (see chapter iii,) and what confirms us in this opinion is, that the embryo grows or enlarges; if it grows it is because it lives; if it lives it is because it has a soul; for in the same manner that death is the separation of the soul from the body, so life is the union of the body with the soul. (Sec. 14.)

Sometimes, although convinced that the fruit of their conception is alive, some females meditate its destruction in order to escape merited dishonor, the chastisement of a parent, or the wrath and vengeance of a husband justly irritated. They meet with persons, who, under the pretence of mistaken charity,—to save their honor, the reputation of a family,—unite with them in their guilty designs, and furnish the destructive means—means which are often as destructive to the mother as to her budding offspring.

60. If involuntary abortion be not ordinarily as dangerous as a natural labour, it is not always so with provoked or wilful abortion. The means more or less violent used in such cases,

and the details of which we shall abstain from entering upon, often leave profound traces in the system if they do not produce death itself in the unfortunate female. It is for these reasons that Hippocrates, justly styled the father of medicine, required from his students an oath that they would never use the secret drugs of the too celebrated Aspasia, that is to say, drugs capable of exciting abortion.

61. The civil as well as the ecclesiastical laws of every civilized country, have inflicted pains on persons aiding in producing abortion, as well as on the woman herself. But it is worthy of remark, that the modern laws enacted against wilful abortion are much less severe than the ancient.

62. In the early ages of the Church, a woman guilty of this crime was condemned to public penance, and received absolution only at the time of death. Sextus V pronounced excommunication against all persons procuring abortion, even before the child should be animated. Gregory XIV restrained it to abortion of the living child.

63. In France, until 1792, feticide and infanticide being put on the same level, the former, as well as the latter, was punished with death, by virtue of an edict of Henry II. In 1782, twenty years in fetters was decreed against every person who became an accomplice. By the law in force since 1810, the mother who procures abortion in herself and her accomplices are punished with close confinement, (reclusion.) The practitioners of medicine who concur or lend their ministration are condemned to hard labor.

64. In England, the procuring of abortion was formerly considered as a murder. "But the modern law," says Blackstone, "does not look upon this in quite so atrocious a light, but merely as a heinous misdemeanor," (*Commentaries, &c.*) By a subsequent law, enacted in 1803, and called the Ellenborough act, the procuring of abortion before quickening, and the aiding or abetting therein, is considered felony and punishable with fine, imprisonment, the pillory, public or private whipping, and transportation beyond the seas. "The same act," says Dr. Beck, "ordains that administering medicines, drugs,

&c., with the intent to procure abortion after quickening, shall be punished with death.”*

65. In the United States, the common law of England has been adopted, but Lord Ellenborough's act has no force. “When abortion is produced with a malicious design, it becomes a misdemeanor at common law, (Russell 553,) and the party causing it may be indicted and punished.” When, in consequence of the means used to produce abortion, the death of the mother ensues, the crime is murder. (Bouvier's Law Dictionary.)

Statutes on this matter, in each of the States, must be sought for in works on Law or Medical Jurisprudence, as the enumeration of them does not strictly belong to our subject.

CASES IN WHICH PREMATURE LABOUR MAY BE LAWFULLY PRODUCED.

66. It would be to misunderstand the spirit of the law to apply the preceeding remarks to practitioners, who at the period of the seventh or eighth month of pregnancy, when the child is reputed *viable*, that is, capable of living, provoke premature labour with the sole view of preserving the lives of the mother and the child, one or perhaps both of which must necessarily be sacrificed, if the full term of gestation be awaited. This happens when the dimensions of the pelvis are so vicious that a child at full term cannot pass through. Then the intention of the practitioner is not culpable. Gardien, however, does not approve of the practice, and says with reason that the means employed for this object are not without danger to both the child and the mother. The former almost always dies, and the latter commonly becomes a victim to inflammation of the peritoneum or of the womb.

67. The only rational means which appear admissible in the case is, the use of warm baths which by relaxing the fibres of the neck of the uterus tends to the dilatation of its mouth

* Beck's Medical Jurisprudence.

or *os*. "If this means," says Dr. Rosiau, "does not suffice to induce premature labour, it is best to wait for the full term of gestation, and then have recourse to the Cæsarian operation or to division of the pubis or symphysiotomy."

68. PHYSICIANS ought to be very circumspect when consulted by mothers and girls who require bleeding and emmenagogues for suppressed menses. These will take good care not to attribute the suppression to pregnancy if they have an interest in concealing it.

In doubtful cases the conscientious parctitioner ought to temporize lest those females should go and consult less scrupulous physicians. He may prudently recommend means which would not be detrimental to themselves or to their offspring, should they happen to be pregnant. He ought to avoid as much as possible general blood letting, especially from the feet. If a small bleeding should not at first be detrimental it may become so, because sometimes these females will themselves reopen the orifice in order to produce the weakness which will excite the miscarriage. As to bleedings by leeches they should be abstained from, because it has been demonstrated that leeches applied to the vicinity of the external organs of generation have the effect of re-establishing the menses; their application may also excite abortion. There are, however, practitioners who prescribe them with a view of diminishing irritation in the uterus, and thereby prevent miscarriage. We would not agree with them in this advice, but would prefer prescribing the leeches to be applied to the hypogastrium, that is, between the pubis and the navel.

69. Apothecaries who give females emetics, purgatives or emmenagogues without the prescription of a physician are much to be blamed, and yet nothing is more common than infraction of this rule. It is in vain these gentlemen alledge that a grain of tartarized antimony could not be productive of much inconvenience; there are cases in which it may cause violent

succussions to the uterus, and become detrimental to health, even when pregnancy is not present.

3. BAPTISM OF ABORTIONS.

70. THE child being, as we have shown, from the moment of conception alive, that is, endowed with a soul, (sec. 59) it follows that it should receive baptism at any period during pregnancy, that abortion may take place. (See sec. 129.)

71. The absence of movements, whether of the members or of the heart, ought not to prevent conditional baptism, since we often see fetuses and even infants born apparently dead, recalled to life after hours of assiduous care, examples of which will be hereafter adduced. Evident signs of putrefaction or decomposition ought alone to deter us from baptising, but we must not mistake for decomposition the flaccidity and sinking or depression of the members, which are yet only in a state of formation.

72. The Abbe Dinouart in his Abridgment of *l'Embriologie Sacree* of Cangiamila, fearing that the action of the air may cause death to the child or embryo of some days existence, recommends that it should first be baptized under its membranes, saying: *If thou art capable of receiving baptism, I baptize thee in the name of the Father, &c.* This condition, *if thou art capable*, establishes the doubt of the life of the embryo, and of the validity of the baptism over the membraneous envelopes. This doubt appears to us to be well founded, since the membranes, although seeming to be continuous with the navel, yet do not appertain to the child any more than the pellicle which lines the egg and serves as an envelope for the chicken, can be said to appertain to the latter. The Abbe hastens to add that after the first proceeding above mentioned, the membranes should be opened, and baptism administered under this double condition: *If thou art capable of receiving baptism, and not already baptized, I baptize thee, &c.*

These kinds of abortions are baptized by immersion in water either warm or cold, in some convenient vessel.

With respect to the child well developed, or which presents the human form, which may be separated from its membranes, and in which life is evident, we pour on water pronouncing the words of the following formula: *I baptize thee in the name of the Father, and of the Son, and of the Holy Ghost.* But where there are no evident signs of life, or where the child does not evince any movements, unless there be indubitable signs of death, the baptism is given conditionally, saying: *If thou art alive, I baptize thee, &c.*

73. When a woman who has been pregnant only for a short time, miscarries, she passes some clots of blood which should be examined with care, in order to discover the young being. Commonly a whitish membrane or thin skin is found at the circumference or border of one of the clots; this is the envelope of the child, over which baptism is to be given, saying, as already directed: *If thou art capable of receiving baptism, I baptize thee, &c.*, as advised by the Abbe Dinouart; then the envelope should be opened, with much care, by means of a knife, lancet, or a pair of scissors. When this is done, a thin fluid or serosity escapes, and the young child being perceived, baptism is repeated under the double condition: *If thou art alive, and not already baptized, I baptize thee, &c.*

74. When the pregnancy is further advanced, and the membranes covering the child not ruptured before or during abortion, there is a mass of more or less volume, reddish and fleshy in a part of its circumference, (the *placenta*) whitish and membranous in the rest of its extent, (the *membranes*,) containing the child and the fluid in which it swims or floats. In this last case, we should hasten to open the membranes to expose the child that it may receive baptism.

75. It is worthy of remark, that negligence in baptising embryos comes from two principal causes: the first is from the

opinion that it is not animated for a period more or less remote from the time of conception, but the fallacy of this opinion we have already sufficiently demonstrated, (chapter III.) The second cause arises from this circumstance, that it can hardly be imagined by some persons how a frail embryo could survive an abortion which is more or less painful and disastrous. But there are practitioners of no mean reputation, who believe that the more imperfect the embryo, the more difficult to destroy its life, and the following cases, extracted from the justly celebrated Cangiamila, come in support of this opinion.

76. A woman in Palermo taken suddenly with abortion, at first thought she was only in the ordinary state of women, although the hemorrhage was more abundant than it should be in menstruation. She paid no attention to it, being ignorant that she was in the family way. The next day she made her case known to a midwife of her acquaintance, who came to see her by chance. The midwife told her it was a case of abortion, and examining what she passed, found, after an interval of twenty-four hours, a living fetus which she immediately baptised. It died very soon after. This child was but four days old from the time of conception.

In 1717, in Palermo, the lady of a general in the galleys miscarried at 4 o'clock in the afternoon of a summer's day. The fetus, which was three months old, came away without the membranes which enveloped it. It appeared dead, and the domestics placed it in a window where it was exposed to a humid and cold air. The next day, about 11 o'clock, the relations of the lady came to pay her a visit, and would, through curiosity, see the fetus; but how great was their astonishment when, by the movements of the navel, which raised and lowered itself, they discovered that the young being was alive, though nineteen hours had elapsed since its birth. It died in two minutes after it had received baptism. The same author records other cases of the same nature.

Indeed, an enlightened knowledge of physiology ought *a priori* to lead us to the like results, because it may be laid down as a law which admits of but few, if any, exceptions, that the lower or less perfect the organization the more the being is tenacious of life; so plants are more tenacious of life than animals, animals than men. Now if we remember that the organization of the child in the embryotic or fetal state is lower or less perfect than it is in after life, we will be prepared to appreciate the above and similar cases, (secs. 108 and 110,) and

be led to admire the beneficence of Providence, who, in establishing this law, would seem to have a special regard for the preservation of the young human being, that it may at least receive by baptism spiritual life.

4. PREVENTION OF OFFSPRING, CONSIDERED.

77. THERE is reason to suppose that some persons who are not aware of the iniquity of the practice, adopt means to prevent the generation of offspring, and the reasons for so doing may be reduced to these two: first, the shame attendant on illegitimate children; secondly, the fear of having too large a family of children. And in order that the public may have an opportunity of effecting the prevention alluded to scientifically and in various ways, they have been lately "favored" with a work—a popular one too, and intended to be read by young and old, male and female, and further, one that highly praises the morality of the practice. We shall not pollute our pages with the enumeration of the means recommended: unfortunately, they are all too successful. Let it suffice to remark, that each and every means resorted to *after conception has taken place* has for its object the destruction of the vivified, that is, living embryo, and therefore, that the perpetrator becomes guilty of the atrocious crime of double murder, murder of the soul* as well as of the body. In fact, this crime is only a species of voluntary abortion, and is equally iniquitous, (see crime of Voluntary Abortion,) and in this treatise there would have been no occasion to make a distinction between both, were it not that the refinements of a false philosophy have already done so, and therefore, each would seem to require to be separately combatted. We have already shown that the human germ is animated from the moment of conception, (see *Animation of the Embryo*,) hence any means resorted to to prevent its development must necessarily destroy its life. Tertullian, who would

* See note on page 42.

appear to be no mean authority on this question, remarks: to prevent being born is to hasten murder; nor does it matter whether it be a born life, or a life that would be born, is sacrificed. "*Homicidii festinatio est prohibere nasci: nec refert natam quis eripiat animam, annascentem disturbet. Homo est qui est futurus,*" (Apol. IX.)

78. The only justifiable means for parents who wish not to increase the number of their children is continency, continency of mind as well as of body.

CHAPTER VIII.

IMPRACTICABLE AND DIFFICULT LABOURS.

1. OBSTACLES TO PARTURITION ON THE PART OF THE WOMAN.

79. Impracticable labours are those which may be caused by mechanical impediments, such as contracted or distorted pelvis, tumors, &c., and they may be presented by either the mother or the child. The details of these and of those which give rise to difficult labours, will be found in works on obstetrics.

80. It is pretty generally known that parturition is commonly difficult, when the first pregnancy does not take place until an advanced period of life, say thirty-five or forty years. The same remark is also true of the female when too young, as under eighteen years. Professor Samuel McClellan, of Philadelphia, says that the child in these latter cases is apt to be still-born; but that it is not fully developed, parturition taking place prematurely.

There being insuperable obstacles to parturition, what are the means of relief pointed out by science and sanctioned by religion? We answer, that, besides the Cæsarian operation and the division of the pubis, there is also that of induction of premature labour: but this could be deferred as long as possible, consistently with the safety of the woman, in order that

the child may have the greater chance of living. This plan is not necessarily destructive to the life of either the one or the other. (Sec. 66.)

But the preferable plan of the female aware of the condition of her case, would be to live in a state of celibacy, as this would appear to be the true indication of her case. (See. 78.)

2. OBSTACLES TO PARTURITION ON THE PART OF THE CHILD.

81. The obstacles to parturition which have heretofore been considered, relate to the woman. The child may also present extraordinary or abnormal conformations, such as divers monstrosities, deformities, abdominal dropsy, (ascites,) dropsy of the head, (hydro-cephalus,) &c. In the case of monstrosities which would render the labour impossible, it becomes necessary to have recourse to the Cæsarian operation, or to symphysiotomy, (section of the pubis) according to circumstances or the position of the child or children. (Sec. 127.) It is no more permissible to sacrifice a monstrous child, by *morcellement* or embryotomy, than in cases where obstacles are presented by the mother. (See the 4th division of this chapter.)

82. As to abdominal dropsy, it is recommended, if practicable, to puncture the abdomen and evacuate the liquid, in order to facilitate the labour. This treatment presents no difficulty, at least in a moral point of view. The evacuation of the liquid is to the child a kind of medication, and may assist in curing the disease.

83. In regard to dropsy of the head, the case is more serious: here arises considerable embarrassment. It is at present, with our received ideas, perhaps one of the greatest difficulties in obstetric medicine—to christian physicians as well as to theologians; but happily these cases are rare,* and besides the hydro-cephalic child thus affected, ordinarily perishes before birth.

* Madame Lachapelle and M. Duges encountered it but 15 times in 43,555 cases of labour.

Professor Debreyne objects to tapping or paracenteses of the head in any case of this kind, "because that this operation being always fatal to the born child, with how much greater reason must it not be considered fatal to the unborn." It is true he adds other reasons, which appear to us unnecessary to be mentioned. Upon this subject we are obliged to differ with this enlightened writer.

Now, with regard to the former part of his assertion, that "tapping is always fatal to the born child," the learned professor is in error. Professor Watson mentions a great many successful cases, particularly the practice of Dr. Conquest, who operated in nineteen cases, and succeeded in ten. We are not informed whether any of these cases were performed in the child *in utero*. Under these circumstances, we do not consider the objection of Dr. Debreyne as valid. We are justified, nay, even required by religion as well as by medicine, to resort to all means for the safety and relief of the mother, which have not a direct and positive tendency to the destruction of the child. But the operation of tapping the head, though it must be extremely dangerous to the young being, has not been proved to be necessarily fatal; hence it may lawfully be resorted to in those cases, when practicable, in preference to the Cæsarian operation, or the division of the pubis, which are commonly so dangerous for the mother. But the practitioner should be careful, before resorting to it, to baptize the child.

84. The greater number of writers on midwifery advise the sacrificing of the child in these cases, because, say they, supposing that the child may, by these operations, (they mean more particularly the Cæsarian operation and symphysiotomy,) be born alive, it will not be viable, and, on the other hand, you expose the life of the mother to the greatest danger. To this it can be replied, that all hydro-cephalic children do not necessarily perish soon after birth. Antoine Duges, in the *Dictionnaire de Med. and de Chir. pratique*, records many cases of survival; for example: "to the age of nine years, [Monro] to the age of fifty-five. [Ekmarks,] to forty-five, [Gall.] to sixty-two, [Dupont.]" Golis, mentioned some individuals as having attained the advanced age of seventy-nine years. Other cases are

mentioned by Dr. Roberts, in his monograph on the diseases of the fetus, in the Am. Jour. of the Med. Sciences, for Aug. 1840.

Let nobody say that the child with dropsy of the head, not being capable of living, (even if the assertion were true,) is consequently of no utility to society, and therefore a charge to it; the assertion is not true: every human being, solely because he exists, is useful to society, though he were to exist but a day or an hour. He has the same right to life that any other individual has. Nor is it permissible to curtail it a moment,—in the same manner that to a person in the agonies of death, to whom there yet remains but an hour of life, it is never allowable to abridge one minute of his sad and painful existence. In the eyes of God, the infant who has but an hour to live, has fulfilled his destiny as well as the centenarian, who is himself but a child, according to these words of Scripture: *The child shall die a hundred years old. Is. A thousand years are in the sight of God as one day. Ps.*

Besides, this ephemeral child, like the moribund or agonizing person, becomes the occasion of the accomplishment of a number of duties; and remark, especially, that its birth procures for it the greatest and most precious of all blessings, to wit, baptism.

3. OF BAPTIZING IN IMPRACTICABLE AND DIFFICULT LABOURS.

86. Experience has demonstrated that out of a hundred labours, there are five or six in which the child comes into the world, presenting the abdominal or lower extremities, or some other parts besides the head, which require the operation of turning, that is, bringing away by the feet.

If the child present the feet, the knees, or the back, the *ac-couchment* is not less natural, and is generally easier or less painful for the mother than head presentations; but the former presentations are more dangerous for the child, especially if the head experiences some difficulty in passing through the

pelvis. Often, in these cases, the child perishes, or is born in a state of apparent death, which is called asphyxia of new-born infants.

If the child is exposed to danger in this kind of natural labour, its life is much more exposed in artificial or preternatural labours, in which the practitioner is obliged to search for the feet. This takes place when an arm presents, or some other part which would render the labour impossible without recourse being had to turning.

The same is the case in uterine hemorrhages, in convulsions, in great exhaustion or fainting, in protrusion of the navel cord, or in defect of its length, &c.

The danger is the greater the longer the time is since the waters have escaped.

Lastly, in case of impacted head, and at all times that the diameters of the pelvis being contracted, one is obliged to apply the forceps, whether at one of the straits or in the pelvic excavation; in these cases the child's life is greatly exposed from compression of the brain.

86. In all these cases it becomes necessary to baptize the child on the part which presents externally at the uterine orifice after the rupture of the bag containing the waters; but where the head of the child can be reached, it of course is the preferable part. (Sec. 107.)

In all cases, where no part of the child presents externally, a finger ought to be introduced, to remove any obstacle that may prevent the baptismal water from reaching the child. The finger will likewise serve as a conductor for the instrument made use of to transmit the water. Care has to be taken that the fetal membranes are not in the way.

In order to baptize the child, a syringe charged with natural water may be used. If this be not at hand, a person may use a sponge or a linen or cotton rag, wetted with water, which is to be carried to the child by the fingers, a pair of forceps, or any other suitable contrivance, and then squeezed or pressed on the surface of the part presenting.

In these various circumstances, as there may be a doubt of the

child's being alive, the baptism ought to be administered conditionally, saying: *If thou art alive, I baptize thee in the name of the Father, &c.*

The condition, *if thou art alive*, becomes unnecessary if a member which has protruded performs sensible motions, or if the navel cord offers evident pulsations.

87. If the child present naturally the feet, knees, or breech, the baptism may be deferred, and should then be given only in cases in which the head would pass with difficulty. [See sec. 107.]

4. EMBRYOTOMY (DESTRUCTION) OF THE LIVING CHILD NEVER ALLOWABLE.

88. Embryotomy is the operation or practice by which the unborn child is divided or cut in pieces, in order to facilitate delivery in certain cases. In obstetrical works, it receives the various names of *morcellement*, craniotomy, embryulcia, crotchet cases, &c. Our principal concern with this operation will be as far as regards the living child.

We shall endeavor to approach this important question with a consciousness of the heavy responsibilities we incur, should we be instrumental in disseminating principles destructive to our fellow-men. We will, moreover, try to divest ourselves of every prejudice, save that for truth. We will, in a word, endeavor to approach it with the feelings and sentiments which should guide the scientific physician and the enlightened christian.

We do not pretend to unfold new truths upon this interesting question, but we dare to assert, to defend old truths—truths which are coeval with revealed religion, which are the expression of its voice, and which the irreligion of modern times has forgotten or closed its eyes against.

89. We will enter upon the examination, guided by these two torches from the unerring light of the gospel: *Thou shalt not kill: Do not evil that there may come good.* In order to

avoid ostentation, we will not at present quote any more texts from the sacred volume; the two we have adduced will sufficiently answer our purpose.

The principle being once granted, that embryotomy of the living child is ever permissible, we cannot conceive any end to the deplorable practice. Scientific impartiality will not permit our covering with a veil the many homicides which are daily perpetrated on innocent unborn beings. When we were attending lectures in Philadelphia, in Jefferson Medical College, one of the professors mentioned that a certain young practitioner boasted that he had used the perforator in ten cases that year—and probably his whole practice did not embrace three times ten cases more. We can scarcely look over the tables furnished by the lying-in hospitals, without being presented with numbers of cases of embryotomy, most of which are no doubt on living children. Dr. Churchill has calculated that this operation is resorted to in every 219 cases of midwifery, in British and American practice. And these cases of embryotomy are, alas, paraded among the triumphs of science!!!

We admire the good sense of Dr. Blundell, who strongly insists on the obstetrician leaving his instruments at home, lest they may be unnecessarily used when at hand. We have ourselves attended many cases, both in city and in country practice, some of which would have required a resort to destructive instruments, (agreeably to the views of their advocates,) and yet we got along without them, and the women got well. Indeed, we feel assured that the cases that require the use of instruments at all are extremely rare.

We consider it strange, that in the nineteenth century, when science, philosophy and civilization have made such progress, that yet it should be necessary to raise the voice against the unnatural practice of destroying living children; yet such unfortunately is the case, for the "dark ages" of midwifery have not yet passed away. While the practice alluded to is encouraged and carried into operation, let our hearts cease to yearn when we read of the sacrifices offered up to Moloch, for it is to be feared that the practice which we presume to deprecate is equally revolting and unchristian.

90. We will not, for the honor of our profession, accuse all, or even a majority of those who have had recourse to this practice, of having designedly committed murder. No; we feel more inclined to think that they would themselves shudder at even the idea of such a crime. But we dare to assert, (for the interests of humanity require it,) that the act itself is actually and virtually murder—a breach of the natural as well as the moral law; a breach of every law, divine and human, that concerns the life of man.

That these practitioners generally acted from motives and principles which, if properly restrained and directed, that is, guided by true religion, would have been praiseworthy, we charitably hope; for, what were the reasons which usually governed them? That the safety of the mother is paramount to every other consideration; that the fetus is devoid of sensibility; that it enjoyed only a vegetative existence; that if left to itself the child would soon die, &c.* Thus the fertile intellect of error invented a hundred excuses, all of which put together, and as many more, could not justify the taking away of one human life. We shall hereafter consider most of the reasons just alluded to, in favor of the practice.

91. We have said, that embryotomy of the living child is a breach of the natural as well as the moral law; do we require proof? God has said: *thou shalt not kill*, and this commandment is without exception; it is the expression of the natural law. What crime has the helpless unborn child committed, to be thus immolated? And is it its bodily life alone that is sacrificed? Alas, not only this, but, what is infinitely of greater

*That some practitioners, however, have acted from more unworthy and selfish motives, we are bound, on behalf of injured innocence, to state. The "vulgar crowd," who really form the bulk of society of perhaps every country, unfortunately attach a mysterious, an almost superstitious importance to obstetrical instruments, or rather to the practitioners who use them, and these they reward with great names and large fees, no small temptations in these faithless times, to unprincipled men, (and alas, our profession is not free from such characters.) Add to these circumstances, the impatient importunities of the woman and her friends, and you have the reasons for the murderous practice we are deprecating; but let the public look with less favor on the men who thus practice, and then there will soon be an end of it.

importance to it, its spiritual life also, most generally, by baptism being omitted. The person, then, who kills the unbaptized child stands guilty of the crime of double murder before God, the sole arbiter of life, and we will leave the reflecting christian to consider how much more culpable it is in the eyes of the Redeemer, to kill the soul than the body.*

But can the teachings of medicine be ever opposed to those of the christian religion? We answer unhesitatingly, no; for we love to think that they are both from the same divine source, thus precluding contradiction or disunion. We think we do not exalt medicine, in saying that it is of divine origin. The inspired writings tell us that *all healing is from God, God created medicines out of the earth, &c.*, and we may confidently lay it down as a good criterion of the soundness of any medical doctrine—its conformity to the teachings of revealed religion.

Now this religion says: *"thou shalt not kill*, but the advocates of embryotomy say: *thou shalt kill*, and consequently are in opposition to it—at variance with the command of Him to whom alone it belongs to take away as well as to give life. Can they say that He has appointed them his ministers to take away life? assuredly no, because if asked for their authority what could they answer? In vain would they say we do it to save the life of the mother, which is the more valuable of the two. Is it not an assumption to say what life is the more valuable in the eyes of the incomprehensible God?

It were easy to continue this examination did time and space permit. We appeal to the reason, not to the passions of these gentlemen. Has not the unborn child as good a right to life as the born child? The helplessness as well as the innocence of infancy, has ever been the sole cause of the compassion and protection afforded to little children by all nations, even the least civilized, and may, therefore, be considered a law of our

* By the death of the unbaptized child, we must be understood as meaning, not that it is consigned to torments, but that it is excluded from heaven. The Scripture, on this subject, is very plain: *Unless one (tis) be born again of water and of the Holy Ghost, he cannot enter into the kingdom of heaven.* See chapter on infant baptism.

nature. Shall the greater helplessness of the unborn babe be made an occasion for its destruction? Every noble and tender feeling of our nature forbids the idea. The jurisprudence of every civilized country says it were better that ninety-nine guilty persons should go unpunished than that one innocent person should suffer. Will medicine be less merciful than law whose professed object is rigorous justice? surely we cannot conceive any being more innocent than an unborn babe. Had the victim only breathed one breath of air, the destroyer of its life would have been arraigned and punished for murder. We cannot conceive why a distinction has been made between both cases, if the distinction has been really made. We may consider this question in another interesting point of view—as connected with the interests of society, but we have perhaps already said enough. We cannot, however, avoid remarking that, fortunately for society, St. Paul, Washington, Columbus, and other illustrious characters, were not submitted to the destructive influence of embryotomy. (Sec. 84.)

Now we earnestly implore the abettors and practitioners of this murderous system to pause, to remember the object of their mission. We are the ministers of *healing*, not of *destruction*, of *life*, not of *death*. Let us cure if we can, but never designedly kill, for we feel satisfied that the saving of a hundred lives would not suffice to cover the sin of one wilful homicide, and especially that of an unbaptized child.

92. It may not be improper to examine here some of the principal reasons alledged in justification of the practice. 1. It is asserted that the unborn child enjoys only a vegetative or vegetable life, and some called the child a parasitic being or growth. Dr. Dewees upon this subject, uses the following sensible language: "Now we would ask, does the comparison prove other than that the child has life; is it not a dispute about terms to call the life of the fetus while in utero vegetable life, and that which maintains its existence after birth animal life? Has any one demonstrated that there is any difference in the quality of that principle which we term life in the two conditions of the animal body? Does not the difference consist

merely in the manner in which the principle is maintained? . . . In a moral point of view, the turpitude of destroying the life of the fetus by design, call it vegetable or animal as you please, will be the same; nor must we permit ourselves to undervalue it by employing terms which have no definite meaning, the destruction of the principle called life, must, in a moral light be called a crime." (*Compend. of Mid.*) The parasitic plant whence the other comparison is derived is never of the same species or germs as that upon which it vegetates or from which it derives its nutriment, but it would be a waste of words to say that the contrary is the case with the fetus and its mother. Therefore the comparison does not hold good. It is really too ridiculous to be at all noticed.

2. It is said that the child would soon perish along with the mother if embryotomy were not performed. It is probable that such would be the result in many cases, especially if the Cæsarian or pubic section were not resorted to; but it is known on the other hand that children have been born alive after the accoucher had pronounced the labour impracticable, and while he was preparing the apparatus that was to bring death not only to the child but also as too frequently happened, to the mother.*

3. It is asserted, and this has been the great plea for the practice, that this operation is much less dangerous for the mother than the Cæsarian or the pubic section, but it appears that it has not to any extent even this recommendation. We have examined some statistics on the subject, and cannot perceive that Embryotomy has any great advantage over the other two operations. "Dr. Hull mentions that according to the accounts at home and abroad the records of 231 cases of gastro-tomy, (the Cæsarian section) gave 139 which proved success-

* The following extract from one of the greatest champions of embryotomy will at once show their morality, and how unnecessarily (to say the least,) the practice is sometimes resorted to. After directing that the *brain be completely broken up*, he adds: "I dwell upon this point because instances are on record of the child *being born alive* after the operation of craniotomy, to the disgrace of the operator and the distress of the patient and her friends." (Churchill—Midwifery American Edition, p 353.)

ful." Now, allowing the remainder to be fatal, (which is not mentioned, nor likely to have been the case,) the deaths would have been only in the ratio of about 1 to 2 $\frac{1}{4}$. The same writer says: "In symphysiotomy the mortality of the mothers was only 13 in 49 cases, or about 1 in 4." In embryotomy, according to the accounts collected by Dr. Churchill, a zealous advocate for the practice, the mortality in 259 cases was 52, or about 1 in 4 $\frac{1}{2}$. Now when we take into consideration that while embryotomy is generally resorted to at an early period, while the two others are employed as *derniers ressorts* and in most cases where embryotomy would not have availed, we can see the comparatively equal security they afford to the mother if resorted to in time, while the life of the child is not sacrificed. And it must strike the notice of every practitioner how much more simple they are, and how much more within the reach of ordinary accouchers and the instruments commonly at their command than the complicated operations of craniotomy, evisceration, &c. Dr. Joseph Clarke lost 16 mothers out of 49 cases of embryotomy; Dr. Kluge, 3 out of 8, and Dr. Granville 3 out of 3. We do not remember having seen any account of the same woman having submitted to this operation more than once, while the records of obstetric medicine furnish many cases of women submitting to the Cæsarian operation as many as six and even seven times. But it must be remembered that it is on other grounds than their comparative safety for the mother that we advocate the Cæsarian section and symphysiotomy, in preference to embryotomy. (Sec. 112.)

4. The next is the celebrated maxim of a large number of physicians: when two lives must necessarily be lost, we should say they, preserve the most valuable of the two; accordingly we should preserve the mother who is useful to society and whose life is certain, rather than the fetus whose life is uncertain, and which is itself of no utility to society. This maxim, it must be said, too often laid down in lectures on midwifery, too often consigned to medical books, and too often carried into practice by the child being inhumanly sacrificed, is in opposition with another maxim, but one which is infallible. *Non sunt facienda mala ut eveniant bona*; "do not evil that

there may come good." Now, feticide being an intrinsic essential evil, it follows that in no case can it be permitted. The precepts of the moral law can never be dispensed with; in no instance is it permissible to kill voluntarily an innocent being.

93. But you will say that the mother and the child will both necessarily perish if the child be not sacrificed to save the mother. It would undoubtedly be a deplorable misfortune to see both perish, but in immolating the child you are not sure of escaping it. There would even be great danger that you would, by embryotomy, cause the death of the mother likewise, as we have already shown.

What then must the Christian practitioner do under such circumstances? will religion bind up his hands and his efforts? We unhesitatingly answer, no. He has the Cæsarian and the pubic operations within his reach—to one or other of which he can resort according to circumstances. Must he abandon the woman to certain death in case of her refusal? To this, we would reply, that it is not the practitioner who abandons his patient; it is the woman herself who consigns herself to a death which is almost inevitable. She has arrested the power of art; her refusal has paralyzed the conservative resources of medicine and the hand of its minister; she only suffers the consequences of the frightful position in which she has placed herself by her obstinate refusal. It is then a misfortune for which medicine or the physician cannot be accountable. It must be attributed to the sole will of the woman. (See this subject continued in the next chapter.)

And now, fathers and mothers, you will understand that when the accouchuer applies to you for leave to perforate, cut up, or otherwise destroy your living child, you have no authority to give it, but in consenting to it you listen not to the voice of God or of nature. You become equally with the practitioner guilty of a crime no less than murder—guilty of the violation of the natural and moral law—of the violation of the parental sentiment—guilty, in fine, of the death of the soul

(where baptism is omitted)* and of the body of your own offspring.

4. THE CÆSARIAN OPERATION, (GASTROTOMY.)

91. GASTROTOMY or gastro-hysterotomy is an operation which consists in incision of the anterior parietes of the abdomen and uterus, whether during the life of the mother or after her death, in order to bring away the child.

This operation is of very ancient origin. No doubt it is an error not to trace it up beyond the birth of Julius Cæsar, although his name might have been given to it. It is much more probable that *he* took the name of Cæsar from the operation which was performed to bring him from the womb of his mother, who died *enciente*. This is the opinion of Pliny, the naturalist, who says: *Primusque Cæsar a cæsomatris utero dictus*.

It is thus that the Romans called by the name of Agrippa, footlings or children who came to the world by their feet.

According to the definition we have given, the Cæsarian section is practised on the dead as well as the living female. In the former case, its object is the preservation of the life of the child. In the latter, its object is the preservation not only of the child but also of the mother, to whose parturition there are opposed some invincible obstacles.

CÆSARIAN OPERATION ON THE DEAD FEMALE.

95. The civil laws, we believe, of most countries direct the performing of this operation on pregnant females who succumb. It becomes especially indispensable after the sixth month of pregnancy, because it is at this period possible to preserve the life of the child. Cabanis writes that Fortunio Leceti, a distinguished *savant* of the 16th century, came to the world at the

‡ * See note on page 42.

age of five months, and that Brouzet in his *Education Physique des Enfants*, cites two or three cases nearly similar and not less wonderful.

Sacred legislators order the practice of it at all periods of gestation, in order, at least, to confer baptism on the child. But previously to proceeding to the operation we should assure ourselves of the female's death,—a matter which is not always very easy. Often there is much precious time lost in the proofs resorted to in such cases, whilst we should operate immediately if it be not wished the child should share the fate of the mother.

If there be on record instances of children being found alive in twenty-four hours and upwards after the mother's death, it also happens often that they perish much sooner. In all cases it is necessary to operate with the same caution as if the woman were alive. The practitioner ought always to bear in mind the observations of some accoucheurs who performed this operation on women who were recalled to life, or who recovered.

96. *Signs of death of the mother.*—Authors have pointed out a great many signs to distinguish between real and apparent death, but all of these have not the same value. The principal ones are the following: Hippocratic countenance; coldness of the body; obscurity and sinking down of the eyes; abolition of motion; insensibility to mechanical and chemical irritants; absence of circulation and respiration; stiffness and inflexibility of the members, and putrefaction.

[1.] The *Hippocratic countenance* is characterized thus: wrinkled forehead; hollow eyes; nose pointed and bordered with a dark color; temples hollow and wrinkled; ears turned up; lips pendant; cheeks depressed; chin wrinkled and shrivelled; the skin dry and livid; the eye-lashes strewed with something like dust, of a whitish color. But all these characters of the Hippocratic face are sometimes found in the living, and are frequently absent in persons who die suddenly, or after diseases of short duration.

[2.] *Coldness of the body.*—This sign comes only by degrees. It comes slowly in fat subjects, in young persons after

acute maladies, after apoplexy and the asphyxias. In cases of a contrary character the coldness comes on very rapidly.

[3.] *Obscurity and sinking down of the eyes* was regarded by Louis as a sign characteristic of death. But the mucous and glairy pellicle easily detached and broken down, which is remarked in most corpses, was not considered by the celebrated physicians as a certain sign of death; because we often perceive a glairy or mucous varnish on the transparent cornea in certain diseases of the eye-lids, and because under other circumstances also the eyes become likewise obscured.

"It is impossible," says Dr. Rosiau, "to consider flaccidity of the eyes as a certain sign of death. It is well marked in a great number of dead bodies, but it is also remarked in a great number of asphyxias, whilst it is not uncommon to see eyes preserve their brilliancy and freshness after sudden death from apoplexy."

[4.] *Abolition of muscular power* is not an unerring sign of death, since it may be remarked in fainting. We see, moreover, on some occasions, muscular contractility persist after death for some time. It is thus that the uterus has been observed to preserve its contractility so as to expel the child after the death of the mother. It is this last circumstance which has made Cangiamila fall into the strange error of being led to believe that the child had in these circumstances, made powerful efforts to come away from the womb by its own efforts. The fetus shut up in that organ is merely a passive agent, whether alive or dead, and cannot make any effort to come out of its prison.

[5.] *Absence of circulation and respiration* is not an unfailing sign of death since it is observed in fainting and in asphyxia.

[6.] *Rigidity of the members* was regarded by Louis as an infallible sign of certain death. He remarked that at the cessation of the muscular motions the articulations (joints) commenced losing their flexibility and became rigid (stiff) even before diminution of the natural heat. But we see corpses which do not present this rigidity, and, on the other hand, we

see living subjects with permanent or spasmodic contractions in one or several parts of the body.

It becomes here necessary to make an important remark on the subject of rigidity and inflexibility, in order to distinguish cadaverous rigidity from that which is of a nervous, tetanic, spasmodic, &c., nature. According to two grave and imposing authorities, Louis and Nysten, the distinction is this: nervous, spasmodic, &c., rigidity always *precedes* death, whether apparent or real, whilst the contrary is the case with cadaveric rigidity, that is, it always manifests itself *after* death. Moreover, when the convulsive or nervous rigidity has been overcome, the member returns suddenly to its former position, it obeys, on the contrary, all the movements given it when the rigidity that is overcome is the effect of real death.

If the death be real, the spasmodic contractions cease in the course of an hour or two, and the cadaveric rigidity invariably succeeds. It is said that in case of certain death the lower jaw being depressed will not arise to meet its fellow, whereas, the reverse may be expected if the contraction be of a nervous or spasmodic nature.*

[7.] *Want of muscular contractility under the galvanic fluid or influence* is a sign, which, according to Dr. Debreyne has never failed, but the presence of contractility is not a sign of life as contractility will be in many cases produced by galvanism for some hours after death. This we have ourselves witnessed in the case of a young man who was hanged in Louisville some years ago.

Galvanization being perhaps the most infallible means we possess for determining the condition of life, whether present or absent; it is evident, says Dr. Debreyne, that it should, when possible, be resorted to in all doubtful cases previously to performing the Cæsarian operation. but it must be remembered that its use is very limited—to an hour or two, as after that period the object of the operation is apt to be frustrated. It must

* Frigorific rigidity, that is, rigidity which is the effect of asphyxia from congelation (cold is general and occupies all the parts of the body. The abdomen itself is affected with it as well as all the other parts—a circumstance which does not take place in nervous rigidity.

be confessed that the galvanic proof is more of a scientific than of a practical character. Hence it is seldom resorted to for this reason, that muscular irritability or contractility is not soon enough extinct, it being in some cases preserved for twenty or twenty-seven hours after death. But a case is recorded in which it became extinct in a hour and a half after. The above considerations of Professor Debreyne are founded on this latter fact.

[8.] *Putrefaction*, when really established, is the only sign of real death; but a commencement of it does not suffice to characterize the cessation of life, since we see persons recover after their skin was covered with violet spots.

If it were necessary to wait for the development of putrefaction in order to decide on the propriety of the Cæsarian section, the operation would be without effect; the child would inevitably have perished; and yet it would not be proper to renounce it in cases where putrefaction had already commenced.

But when to cessation of the pulse and of breathing, (circulation and respiration) there is joined stiffness and rigidity of the members, with loss of transparency of the cornea, certain death cannot be doubted, especially if these signs be observed at the close of a grave, acute, or a chronic disease; and we ought immediately to proceed to the Cæsarian section after having, in doubtful cases, employed the means which will be immediately pointed out—means which are proper for recalling life if any spark remain, or for confirming death when it has actually taken place.

If, on the contrary, no evident cessation of the pulse and of breathing is not accompanied with coldness of the body and stiffness and inflexibility of the members or with loss of transparency and brilliancy of the eyes, the operation should be suspended, even though several days should have elapsed since the apparent death has occurred. But as we have already suggested, the evidence to be derived from galvanism would appear to be conclusive.

97. *Means for recalling life in suspended animation.*—When called to a pregnant female who has sunk, and in whom

the signs of death are not well marked, our first care should be, if possible, to recall life.

If no symptom of apoplexy be present, the patient should be extended horizontally on a matress or a straw bed, exposed to a free circulation of air; all persons who can be of no assistance should be requested to retire. Frictions on the extremities with warm dry flannels should be resorted to; the temples and face are to be sponged with cloths wetted with vinegar or whiskey; the nostrils are to be titillated with the feather of a quill; substances of strong penetrating odor as vinegar, spirits, ether or hartshorn (ammonia) are to be placed under the nose; and even some drops of these liquids may be introduced into the mouth; some feathers or fetid substances ought to be burned under the nostrils; the feet may be immersed in a warm bath rendered stimulating by the addition of some table salt.

98. If signs of congestion about the brain be remarked, if the eyes be prominent and brilliant, if the face be redder and fuller than natural, the woman should be placed in a sitting posture, or at least her head and chest should be raised by means of pillows; bleeding from the foot, or the arm, or better, from the jugular vein, is to be employed or even the temporal artery may be opened,—and during this time the feet should be immersed in a warm bath as already directed. To these several means may be added scarification and cupping of the thighs and of the region of the heart; and lastly, the use of the moxa may be found of considerable advantage.

99. If the apparent death or suspended animation be attributable to asphyxia, or as Dr. Watson justly prefers calling it to apnea, that is, privation of breath, the general indications are, to establish the action of the heart and to introduce into the lungs the gas proper to excite them; but the full consideration of this subject would lead us beyond the limits we have proposed to ourselves. More particular information can be had from works written on the subject of asphyxia.

At all times when the heart preserves its action we should introduce air into the lungs, in order that the blood may draw from it the principle necessary to reanimate the organs. If the

circulation be entirely extinct the introduction of air into the lungs is useless. We should commence with soliciting the contractions of the heart with stimulants internally and externally, thus: frictions on the regions of the heart, on the spinal column (back-bone,) on the hands and feet, aspersions of cold water on the face and on the breast, excitants applied to the entistinal canal, having at all times care to remove every obstacle to the admission of air and its introduction into the lungs.

100. After having exhausted all the resources of art uselessly, the accouchuer or tho midwife ought to examine and ascertain whether the dilatation of the mouth of the uterus may not admit of the operation of *turning*, or the application of the forceps. One or the other of these means, if practicable, would, according to Dr. Rosiau, be preferable to the Cæsarian operation in case of uncertainty of real death.

Rigondeaux, surgeon to the military hospital of Douay, being called to a woman in the country, found, on arrival, that she was apparently dead for two hours. He remarked that the body had preserved its heat and the extremities their suppleness. Finding the uterine orifice sufficiently dilated, in place of resorting to the Cæsarian section, he decided upon searching for the feet and bringing away the child through the natural passages, which he executed with ease. Care was taken both of the mother and child. The latter, which was born in a state of apparent death, became reanimated at the end of two hours.

He forbid the burial of the mother until the members should become cold and rigid. Before the close of the day he was informed that she also was resuscitated in two hours after his departure. (*Journal des Savans, January, 1749.*)

101. We must not forget that after death the womb sometimes enjoys a contractile power sufficient to expel the child; hence the necessity of ascertaining, before operating, whether the young being has not been expelled during the administration of remedies to the mother. By not attending to this precaution, a useless operation may be performed as happened in Sicily in 1746. Alberte Cassioppe, who died in the fifth month of pregnancy, was opened. The operator was astonished at finding nothing in the uterus. But search being made, the fetus was found dead in the bed.

METHOD OF PERFORMING THE CÆSARIAN OPERATION ON THE DEAD FEMALE.

102. THE operation having been decided upon, the operator is to furnish himself with the things requisite. Whenever entire hope of restoring the woman to life is not lost *the proceeding must be the same as in the case of the living female*. The apparatus consists in the following, to-wit: two bistouries, one convex, the other probe-pointed, some charpic or surgeon's lint, compresses, bandages, a sponge, warm water, some cold water and vinegar, for the operation, and some pure water to baptize the child with.

If bistouries be not at hand a razor or a sharp knife could be substituted.

103. The woman is now to be placed near the edge of the bed, with the head and the breast elevated and sustained by pillows, the thighs and legs half bent. A cushion is to be placed under her loins, to make the abdomen tense. One assistant retains the woman in this position, while another supports the uterus with his hands flat on the hypogastrium.

The operator makes an incision through the mesial line from the umbilicus to the vicinity of the pubis, (or in proportion according to the size of the fetus,) cutting, at first, the skin from without inwards, then the cellular tissue. Having reached the *linea alba*, a membranous space between the *recti* muscles, he makes a small incision below the umbilicus and through it introduces into the abdomen the left indicator finger which serves as a conductor for the probe-pointed bistoury, or whatever instrument he may use; he then finishes the section of the *linea alba* in cutting from within outwards. The introduction of the finger and the change given to the direction of the instrument have, for their object, the protection of the intestines which present themselves at the opening. Then search is made for the womb which frequently presents itself when the pregnancy is advanced, but which is more or less deeply-seated in the first month of gestation. It is found between the rectum, which is posterior, and the bladder, which

is anterior. Frequently the latter filled with urine conceals the uterus or offers an obstacle to its section.

If the death of the female should be undoubted, he may, without inconvenience, incise the bladder itself, and give issue to the urine which presents an obstacle to the finding of the uterus; but if there be any doubt with regard to the death, he should endeavor to evacuate the bladder either by compressing it with his fingers or by introducing a catheter, if he has one. Indeed, in cases of doubtful death, it is with the introduction of this instrument he ought to commence before incising the abdomen.

The uterus having become exposed, is to be incised on its anterior surface, in a direction corresponding with the wound made in the abdomen—commencing in the part nearest to the umbilicus, and this incision is to be carried down far enough to admit of the child being extracted. The section of the womb is made from without inwards, until the membranes of the fetus be reached; as soon as these are perceived the indicator of the left hand ought (as in the section of the abdomen) to be introduced into the opening to serve as a conductor for the instrument, and then the section is finished by cutting from within outwards. By observing this precaution the child would run no risk of being wounded.

If the placenta should present itself in the way of the instrument, Gardien advises its detachment with the hand rather than its division, and then to rupture the membranes at its circumference in order to give exit to the waters.

The membranes being incised or ruptured and the liquor *amni* evacuated, the young being is perceived and should be immediately extracted by seizing one or both of its feet, if they correspond with the fundus of the womb, or by insinuating the indicators of both hands under the lower jaw if it be the head that presents.

104. The child thus brought into the world manifests some signs of life or they are entirely absent. In the first case baptism is immediately given lest the new being should succumb, (sec. 72,) in the second case, that is, when there are no signs

of life, when it presents no evidence of respiration nor of the heart's acting, unless there be undoubted signs of putrefaction it is baptized conditionally. And after being satisfied that there is no other child in the uterus, we should endeavor to recall the one extracted to life. After having divided the navel cord at two or three inches from the abdomen, a ligature (bander) is put on the cord about one inch from its insertion, unless the lividity and tumefaction or swelling of the face indicate congestion of the brain. In this case the blood is allowed to run in order to disgorge the vessels before the ligature is applied. Afterwards, according to the nature of the case, we resort to the means which will be hereafter described under the heads of *Apoplexy of new-born Infants* and *Asphyxia of new-born Infants*.

105. If, after opening the uterus, there be found neither embryo nor fetus, examination should be made in the Fallopian tubes, in the ovaries and in other parts of the cavity, because the pregnancy may have been extra-uterine.

A woman in Toulouse died in the ninth month of pregnancy, and a surgeon performed the Cæsarian operation on her. He found the womb of the volume ordinary in pregnancy, but its parietes (walls) were four fingers-breadth in thickness. Its cavity was found very small, and without a vestige of a fetus, but filled with dark grumous blood. He thought at first the case was one of false pregnancy, but having extended his examination further into the abdominal cavity, he found a fetus on the left side of the epiploon or caul.

106. If, after or during the operation, the woman who was believed to be dead should revive, it becomes necessary to remove, with care, the after-birth and clots of blood which may have been formed in the uterine cavity. In case of abundant hemorrhage arising from inertia or torpor of the uterus, authors recommend the washing of the uterine wound with cold vinegar and water. Injections of the same kind into the cavity of the uterus are likewise indicated.

Previously to dressing the external wound, the issue of the blood and liquor amnii which may have escaped into the abdominal cavity should be procured. If the situation in which the woman is placed do not permit their evacuation, recourse

may be had to injections of warm water in order to cleanse the surface of the viscera.

The uterine wound requires no dressing. As to the abdominal wound, after putting ligatures on the bleeding arteries, if there should be any, it is to be covered with a large pledget of lint and compresses sustained by a bandage around the body. The dressings should be repeated two or three times a day to favor the escape of purulent matter, and to prevent its extravasation into the hypogastrium. Following the plan of M. Bacqua of Nantes, we ought every day to rupture the adhesions which the uterus is liable to contract with the intestines and abdominal parietes; adhesions which may be of consequences very prejudicial to the female. Moreover, she should be submitted to treatment antiphlogestic in the highest degree. A Catholic lady, in Philadelphia, on whom Professor Gibson performed the Cæsarian operation recovered after having taken no nourishment for a few days but some holy water! This case occurred in 1835 or 1836, while we were attending lectures in that city. We have been informed that the Professor has since operated on the same lady with the like success, and we presume the holy water regimen was not forgotten the second time.*

107. A woman having died in child-bed, although the child may have been baptized *in utero* by means of syringe, sponge, &c., or rather though it should have received baptism on some member which presented, yet we will not be excused from performing the operation for many reasons. In the first place, it cannot be doubted that sound physiology justifies the Roman Ritual in requiring that after the operation the baptism should be repeated conditionally, in case the child should have received this sacrament only on some member, because according to the majority of theologians, it is not indifferent whether baptism be received on the head or on some member, as the hand or foot presenting externally. Another reason is that after having provided for the spiritual life of the child, we should also endeavor to procure its corporal life. Finally, as there may be a plurality of fetuses in the uterus, which are equally en-

* See these cases detailed in Gibson's Surgery

titled to our solicitude, we ought, by means of the operation to search for them in order to bestow on them the care to which they are entitled.

108. The time which has elapsed since the death of the mother, though it may be long, will not excuse us from performing the Cæsarian operation. Here it would be wrong to yield to the decision of those practitioners who would pronounce upon the death of the child; because of that they can never be perfectly sure. Although ordinarily the fetus does not survive the death of the mother for any length of time, yet numberless facts prove that it may survive her, not only for some hours, but even entire days. Hence, though a long time may have elapsed since the woman died, and though she may have been even buried, the operation should not be omitted. The truth of these observations will be made manifest by the following:

PROOFS THAT THE FETUS SURVIVES THE DEATH OF THE MOTHER.

In the month of July, 1732, a pregnant female having died, two physicians and two midwives who happened to be present, maintained that it was useless to perform the Cæsarian operation, because that they found neither heat in the pelvic region nor any movement nor other sign of life in the child. A surgeon who was called in, gave a different opinion, and agreeably to this the section was made in fifteen hours after the mother's death. A living infant was extracted and was baptized, and in four hours after it died. (Rosiau.)

A husband who was absent from home, found, on his return, that his wife, who was in the family-way, was buried the day before. He had her exhumed, and had the consolation to see born a living child. (Dinouart.)

The celebrated Gardien relates that the princess Pauline, of Schwarzenberg, in a feast given by the Austrian Ambassador, her brother-in-law, died from the effects of a burn; that she was pregnant, and that the fetus was found alive, although she was not opened until the next day after the accident.

The Abbe Dubois, canon of the Cathedral of Mans, was informed (while yet a vicar of the parish of Pre) that a pregnant woman had just succumbed, and that the physician had declared that the child was dead. Listening only to the voice of charity, this zealous ecclesiastic hastened to the house of the

deceased, and sent word to the physician, who refused to comply with his invitation. A midwife, in the neighborhood, summoned in her turn, after some resistance on her part, performed the Cæsarian operation and brought to the world a living child which was baptized by the Abbe in the presence of a large number of persons. Dr. Rosiau relates a case nearly similar to the foregoing.

Joseph Cimin, of Corlorme, wrote to Cangiamila, in 1744, that he had opened, up to that period, thirteen pregnant women, (who had died,) in all of whom he found living children.

M. Cummerin, curate of Caltinsata, wrote to the same author, in 1748, that since 1704, of sixty children brought away by the Cæsarian operation, there were found but six dead, that of the remaining large number which was found alive some were of very early age, (uterine life,) one of them being only forty days; even there was one in this number which was taken away forty-eight hours after the mother's death. (Debreyne.)

It appears to us unnecessary to multiply further the examples of children found alive in the wombs of their mothers after death. Many such cases will be found on record.

For a successful refutation of the assertions of Velpeau and Moreau, which tend to invalidate the teachings of religion relative to the Cæsarian operation after the death of the mother, see the *Essai &c.*, of Professor Debreyne, page 202, 210, *et seq.*

109. Persons aware of the pregnancy of a woman who has just died, are obliged to make it known, in order that by the Cæsarian operation the child may be preserved from certain death, or at least, that it may have its spiritual life secured by baptism.

The fear of defamation in the case of an illegitimate pregnancy would not dispense with at least those who may order the operation and those who could perform it.

The civil and judicial authorities, and we may add ecclesiastics, ought to use their influence to have this operation performed when necessary. Those who neglect its performance often render themselves guilty of homicide.

110. The charitable ought to be aware that fetuses and newborn infants do not perish with as much facility from suffocation as adults, as will be seen by the following cases. The physi-

ological explanation would perhaps be this: the circulation of the infant which has commenced to respire no longer resembles the circulation of the fetus in utero; yet this change in the circulation does not take place immediately after birth, as the foramen of the Botal and the arterial canal which serve for the fetal circulation are not obliterated for some time. The following cases tend to confirm this view:

In 1719, a female child was buried at the moment of birth by its wicked mother, but was axhumed alive after some hours.

In 1764, some barbarous parents, after having wrapped up in linen their little daughter, who had been just born, thrust her into a heap of straw, whence she was withdrawn alive in seven hours after. (Sec. 76.)

THE CÆSARIAN OPERATION ON THE LIVING FEMALE.

111. An imperious necessity only can authorize the performance of hystirotomy on the living subject; because a large number of those who submit to it lose their lives after the operation. Hence, recourse should not be had to it but when the life of the mother and that of the child are immediately threatened.

112. The circumstances which would authorize the operation on the living female, are: extreme contraction of the diameters of the pelvis; and the rule may be established that when the sacro-pubic diameter is but two inches and a half, the operation becomes necessary; exostosis (growth of bone) from the internal surface of the pelvis; schirrous or fibrous tumors, occupying the greater part of its cavity; voluminous aneurisms of the iliac arteries and of their branches; these are the lesions which may render the operation necessary.

A large vesical calculus, which the child's head may push before it, may require the Cæsarian operation, but it becomes necessary, previously to having recourse to it, to assure ourselves whether cystotomy may not be practicable in the interval of the pains.

When the uterus is enclosed in a ventral, inguinal or crural

hernia, and becomes enlarged therein, along with the product of conception, it becomes necessary to resort to the operation which, under the circumstances, is said to be simple and of but little danger.

Lastly, the operation is needed in many cases of monstrosities.

112. There are some practitioners, alas, too many, who, in these cases, recommend the cutting up of the child, (*morcellement*,) rather than expose the mother to the dangers attendant on the Cæsarian operation. But, besides that it is not allowable to take away the life of any human being whatever, the *morcellement* would be almost, if not entirely as dangerous for the mother as the Cæsarian operation. (See the article: *Destruction of the living child never allowable*, p. 46.)

In cases of insuperable obstacles to parturition, if the female should not submit to the Cæsarian operation or to symphysiotomy, (which will be hereafter discussed,) she would undoubtedly become a victim herself, as well as her child, to her obstinate refusal. There are practitioners who, in such cases, in order to save the mother, advise the destruction of the child, after it is baptized. It would be, say they, of two evils, to choose the less, since in acting we save one individual, whilst in abstaining from the *morcellement*, we see perish both the mother and the child. But we have already said, that it is never permissible to destroy the child. We will now add, that *morcellement* or embryotomy in case of extreme contraction of the pelvis is almost always fatal to the mother, because it being impossible to introduce the hand into the uterus, *the instruments are introduced at hazard, and frequently act on the organs of the female*. M. Giraud thus expresses himself on this subject: "I have seen this operation (*morcellement*) practiced several times, by the most distinguished men, and the women succumbed immediately after." (Journal de Medicine par M. M. Corvisart Leroux et Boyer.)

We hope there is scarcely a woman who would refuse submitting to the Cæsarian operation, or,—as the case may require—to symphysiotomy, when it is represented to her that her

own death is certain, as well as that of her child, whilst both may be saved by one or the other of these operations. To these motives should be added those of a higher and more sublime character, that it is the greatest act of charity she can perform, since she exposes her life to procure eternal salvation for her child. And the practitioner would probably find his representations much strengthened by requesting the attendance of her pastor, who would urge her to suffer with christian resignation. In case of an obstinate refusal not to submit, we would, unless prohibited, baptize the child, but we could not consent to sacrifice it, even when its extraction in pieces would not be equally dangerous to the mother.

113. Is the obligation on the part of the woman to submit to the Cæsarian operation or to symphysiotomy real and positive? This question we do not presume to pronounce judgment upon, the authorities on it being divided. Monseigneur Bouvier. says, with much reason, "If the woman become so weakened by her sufferings that she becomes incapable of supporting this severe operation, it would not be permissible to undertake it for the interest of the child, because this would be killing the mother, and we should not "do evil that there may come good." Besidess the child may be expected to survive and receive baptism." [Debreyne.]

"As to the actual state of weakness or exhaustion," continues M. Debreyne, "which authorize the renouncing of the operation, we will add that these prohibitive motives or circumstances should extend to acute and chronic diseases more or less grave and advanced, with which the woman may be attacked during parturition; because that these complications diminish infinitely the chances of success, or rather render the death probable or nearly certain. And, moreover, the mother being dead, she could be opened immediately, in order to confer baptism on the child, without waiting for the assemblage of signs characteristic of certain death, (sec. 96.) For, as we have already shown, acute and chronic diseases passing successively through all the phases of gravity and danger, generally exclude apparent death, which is the result of

syncopis asphyxias, or of some other nervous or convulsive affection.

5. OF SYMPHYSIOTOMY (DIVISION OF THE SHAREBONE.)

114. The Cæsarian operation being so often fatal to those women on whom it has been performed, it ought to be abandoned if another of less danger, and which would equally facilitate the egress of the child could be substituted. So, always when practicable, in preference to it, recourse should be had to symphysiotomy, or section of the symphysis pubis, in which are divided only the integuments, fat, and the cartilage (gristle,) which unite the two pubic bones.

115. This operation is the more easy, the more gestation is advanced, because the gristle, swollen and saturated with the fluids, offers but little resistance to the cutting instruments. As soon as the section is effected, the bones recede and the diameters of the pelvis become enlarged. Every inch of separation of the two bones will give two lines in length to the sacro-pubic diameter.

116. Symphysiotomy cannot be substituted for the Cæsarian operation—

1st. When the deformity of the pelvis is such that the greatest separation of the pubic bones will not suffice for the passage of the child.

2dly. When there exist tumors, which entirely obstruct the pelvic cavity.

3rdly. When there exists a hernia of the uterus.

Except in these three cases, and in those to be hereafter mentioned, the practitioner is at liberty to choose between the two operations, to which he should give the preference.

117. Symphysiotomy is alone practicable, and cannot be replaced by the Cæsarian section in the following cases:

1st. When the head of the living child, having with great difficulty passed the superior strait, cannot by the efforts of nature, or with the assistance of the forceps, pass through the inferior strait.

2dly. When the inferior strait being much contracted, an exostosis from the base of the sacrum so opposes the child's head, that it cannot be pushed back above the superior strait.

3rdly. When the head, having protruded beyond the neck of the uterus, is found naked in the vagina, and cannot pass through the inferior strait. The Cæsarian operation would in this case be of no avail, because the os uteri having contracted around the child's neck, would prevent the return of the child into the uterine cavity.

4thly. When the head is so impacted in the superior strait, that it cannot be pushed back into the abdomen, in order to have the forceps applied.

5thly. When the child, having presented the feet, the head becomes arrested in the pelvic excavation or impacted in the superior strait.

6thly. When the breech, having presented, is arrested in the pelvic cavity by the contraction of the inferior strait. In pushing back in order to reach for the feet, one would experience the same difficulty with the breech as with the head.

118. Of the modes of performing these two operations on the living female, information must be sought in works on midwifery. To the same sources we must also refer the reader for the signs of death of the fetus. The details of these subjects would occupy more space than the limits of our work will permit.

CHAPTER IX.

OF MONSTROSITIES, DEFORMITIES, &C.

119. By the term monster, is understood every individual born with an apparent vice of conformation and which presents something odd, extraordinary or frightful. The naturalist gives more extension to the signification of this word, and designs by it every organized being with a shape or with parts that are not natural.

1. CAUSES OF MONSTROSITY.

120. The human fetus, organized by degrees, passes successively from a structure at first simple, to one more complicated. In its development there follows a progression of which all the degrees are in unison with those of the animal scale.

121. It is from these circumstances that Blumenbach, Meckel, Geoffroi St. Hilaire have advanced as an axiom, that monstrosities are the result of retardation of development. It would follow from this theory that if before the perfect development of the fetus, any cause whatever comes to oppose the perfection of its organs, if a nutritive artery too small should not furnish materials sufficient for nutrition; the organ thus deprived of its nutrition, would remain little advanced in organization, would not undergo the ordinary transformations, and would retain a perfect resemblance of the same organ considered in a normal state, in a being of an inferior class, in the animal scale, while one or several other organs, heirs of the nutritive materials it should have received, will take an unusual increase.

This theory will naturally lead us to a brief consideration of the divers causes to which monstrosities, or, as they are sometimes called, *lusus naturæ*, have been attributed.

122. The majority of modern authors think that at a certain period the child that is born monstrous, would have been found well formed. But they are not agreed as to the cause of the change which takes place.

123. Those who admit the *emboitement des germs* are forced to believe in the pre-existence of monstrous germs. The theory ought never to have received admittance into religious heads, because it is to insult Providence, to charge him with producing from all eternity germs incapable of living, or at least of exercising the faculties pertaining to the species to which they belong.

124. One of the opinions which has most generally obtained, is that which attributes monstrosities, as well as mother's

marks, deformities, &c., to the *influence exercised by the imagination of the mother on the child*. That this opinion, though probably sometimes pushed too far, is not without foundations, we think has been shown in the article dedicated to that subject, p. 18.

125. Many authors have attributed monstrosities, and especially acephalic (headless) to diseases experienced by the fetus. Becklard and Duges are of this opinion. The former admits, as a cause of acephalic monstrosity, atrophial of the spinal column produced by a malady accidentally developed in the fetus, in the commencement of its uterine life. Duges thinks that the admission of an anterior disease would explain clearly the different deformities of the cranium and the vertebral column, and that it would furnish the means of giving a much more satisfactory reason for all their varieties, than would the supposition of an original vice or of an imperfect development.

The partizans of this theory attribute these kinds of lesions to dropsy of the head and of the spinal column. This dropsy takes place in the ventricles of the brain; it distends the hemispheres of this organ, separate and distort the bones of the cranium, and of the spine as well as the integuments, hernia or atrophial of the brain may be the result.

126. Sometimes there are met with several heads on one trunk, or several trunks to one head. Also, sometimes two children are found united by some of their parts. As many as six or seven extremities or members, both superior and inferior, have been seen on the same subject. Buffon, in his Natural History, relates that two female children, born at Tzoni in Hungary, in 1707, were united together at the loins, and that they lived to the age of 21 years. They had at the same time the eruptive diseases, such as the measles and small pox; they menstruated at the same time. One was attacked with an acute disease and died; the other expired almost at the same time, although she appeared to feel but little change during the sickness of her sister. The Siamese twins, exhibited a few years ago in this country, and the case of Ritta-Christina or Chris-

tina-Ritta, shown in Paris, in 1829, and described by Dr. Julea de la Fontanille, presented analogous phenomena.

127. Monsters cause much embarrassment both in the accouchment and in the administration of baptism.

If sometimes we see children that are united, and monsters of another character, born through the natural passages, it sometimes happens also that their deformity prevents this happy issue, and that they cannot be extracted except by the Cæsarian operation, or by dismemberment or *morcellement*. But we have already said that this morcellement of children would not be permissible but when there is a certainty of their death, and besides that this laceration would be extremely dangerous, if not mortal, for the mother. (See chap. viii. secs. 4 and 5.) It were better, then, in those cases, to have recourse to the pubic, or the Cæsarian operation.

2. BAPTISM OF MONSTERS.

128. If the monster have two heads and two bodies, baptism ought to be successively conferred on the head of the one and the other, and in cases where the heads cannot be reached by the baptismal water, we should christen the bodies as in the case of two separate children. In cases in which the monster would have two heads and but one body, or two bodies and one head, it would be necessary to give two baptisms, saying: If thou art a human being, and alive, *I baptize thee, &c.* If thou art another human being, and alive, *I baptize thee, &c.*

When the monster is acephalous, that is, without a head, it ought yet to be baptized, saying: If thou art alive, and a human being, *I baptize thee, &c.* This latter kind of monster, dying almost as soon as born, ought to receive baptism previously to the section of the navel cord—the only connexion it has with life.

Finally, baptism ought to be conditionally given to any being born of a woman, however deformed or extraordinary it may be, or whatever resemblance it may bear to a brute ani-

mal. "We deny," says M. Debreyne, "the possibility of bestial procreation, for God will never permit these abominable productions, nor the confusion of the human with the animal species.

It is more than probable that those monsters which have been reported as resembling animals, (exaggerated as the accounts of them undoubtedly are,) are produced from strong emotions excited in the minds of the pregnant women by the animals these monsters resembled. Malebranche declares that forms the most fantastical are sometimes aborted by women, "for not only do they give birth to deformed children, but also to forms resembling the fruits they longed for." . . . "These poor fetuses become like the things they [the mothers] desired with too much ardor."

CHAPTER X.

NECESSITY OF INFANT BAPTISM.

129. OUR labor on behalf of the subjects of this treatise would appear to be defective without a few remarks on the necessity of Infant Baptism, foreign as are religious polemics from the spirit and intentions of this work. Upon the necessity alluded to we shall be brief, urging only some of the more cogent reasons which strike us in its favor.

So far as we know this doctrine is received, and has ever been received and practised by the vast majority of the various denominations of Christians. Its being taught by the Church, whose teachings are infallible, should make the matter conclusive. But the Holy Scriptures are plain upon the subject—we hardly know of any doctrine upon which they seem plainer; they establish the following points: *First*, that all mankind are conceived and born in original sin; thus speaks the royal Prophet: *For behold I was conceived in iniquities, and in sins did my mother conceive me*, [Ps. l. 6.] and again St. Paul: *as in Adam all die*, . . . [1 Cor. xv. 22.] *Secondly*, that no one defiled with sin can enter heaven; St. John says:

There shall not enter into it any thing defiled. . . . [Apoc. xxi. 27.] *Thirdly*, that baptism was instituted chiefly for the remission of original sin; *Rise up and be baptized and wash away thy sins*, [Acts xx. 16.] and again: *He that believeth and is baptized shall be saved. . . .* [St. Mark, xvi. 16.] *Fourthly*, that nobody without being reborn of water and the Holy Ghost can ordinarily enter the heavenly kingdom; Jesus Christ who is the way, the truth, and the life, says, and remark he confirms the same with the solemn double asservation, (shall we say oath?) *Amen, Amen, I say to thee unless a man* (in the original *tis*, one, any one,) *be born again of water and the Holy Ghost, he cannot enter into the Kingdom of God.* Note that in these several passages there is no distinction of young or old, born or unborn, male or female; thus embracing the whole human family. But as it were to remove every doubt upon the subject, the divine Scriptures record the baptizing of the whole household of Lydia and a couple of others, in some of which there surely must have been young children: they were indeed strange houses if all in them were adults only.

The proofs from Scripture in favor of this doctrine could be multiplied, and it could be shown from unquestionable authority that infant baptism was practised in the ages of the Church subsequent to the apostolic, at a time when it is admitted on all hands there was no innovation. But have we not said enough to convince any person believing in the divine authority of the Scriptures? For further information upon this subject, as well as upon private baptism, we must refer the reader to the treatises on Baptism: we would particularly recommend that of Bishop Kenrick.

Private Baptism.—“Any person, whether man, woman or child, may baptize an infant when in danger of death, thus: Take common water, pour it on the head or face of the child, if you can, if not, on the part next thereto; and while you are pouring it say the following words: *I baptize thee in the name of the Father, and of the Son, and of the Holy Ghost, Amen.*

CHAPTER XI.

APPARENT DEATH NEW-BORN INFANTS.

129. THE infant is frequently born in a state of apparent death, and for want of care the death may become real. Two proximate causes may produce apparent death, viz: apoplexy and asphyxia. The enlightened christian need hardly be informed that in such cases his first duty will be to baptize the child, [conditionally or otherwise, as the case may be,] and then resort to such means as are calculated to recall life.

1. APOPLEXY OF NEW-BORN INFANTS.

130. THE apoplexy of new-born infants is considered as having its seat in the brain. It is the compression exercised on this organ that occasion this apparent state of death in which the infant is sometimes born. It is a kind of profound coma, accompanied with loss of the powers of motion and of sense. This compression is injurious by preventing the brain from responding to the action of the heart.

131. *Signs.*—The signs or symptoms which characterize this apoplexy are: face livid or tumefied, eye-lids swollen, eyes prominent, neck and breast streaked or speckled, abolition of sense and motion, and consequently suspension of circulation and respiration. The compressed brain not being able to obey the action of the heart, the latter in its turn ceases to act, because its action cannot long subsist without the influence of the brain.

132. *Treatment.*—The imminent danger in which the infant is, requires the most prompt assistance.

It is necessary to cut the umbilical cord, or its ligature if it should have been tied. The blood which flows will disgorge the vessels of the brain and of the thorax, which have been sur-charged.

It is, however, seldom that the section of the cord produces

a disgorgement sufficient to overcome the compression which threatens to annihilate the vital forces, because sometimes only a few drops of blood escape. In these cases one or two leeches should be applied behind each ear, and very probably the recommendation of Dr. Eberle to apply a wide mouthed cupping glass, furnished with an exhausting pump over the navel, would be found advantageous. Some additional blood by one or both of these methods could certainly be obtained. The abdomen may, during these operations, be gently compressed. The infant should also be immersed to its shoulders in a warm bath rendered stimulating by liquor, as whiskey, vinegar, wine, &c., or by the addition of some powdered mustard. In proportion as the blood flows the circulation and respiration become re-established and the lividity of the face and body diminished by degrees.

2. ASPHYXIA OF NEW-BORN INFANTS.

133. *ASPHYXIA*, or more justly *apnia*, is a kind of apparent death by the privation of red or oxygenated blood. The *symptoms* are these: The skin is not colored as in apoplexy, often it is even pale; the mucous of the mouth is often bluish; the face is not swollen; the members are flaccid; the respiration not established, and the circulation stopped.

134. *Treatment*.—If the mother have profuse hemorrhage, [bleeding,] the cord should be cut and tied, and the child removed to a place where it may receive the necessary attention. If, on the contrary, there be no inordinate bleeding, if the placenta have not commenced becoming detached, and especially if the cord present some slight pulsations, some time should be allowed to elapse before the child is separated from its mother. This time should be employed in cleansing the air passage, to-wit: the nostrils, mouth, and faces of the meconisties lodged in them; a rag for this purpose may be dipped in a solution of table salt, which has the property of dissolving these slimy substances. The child should also be put into a

warm bath which is rendered stimulating by the addition of liquor, salt, mustard, &c.

After the child has been separated from the mother, if the asphyxia continue, air should be gently introduced into its lungs, (insufflation) by means of the mouth or a pair of bellows destined for that purpose; the air is best introduced through one of the nostrils, while the other nostril and mouth are kept closed to prevent its return; and the larynx is also pressed backwards to prevent its escape through the swallow or asophagus: during this time the chest and abdomen are compressed so as to imitate natural breathing. The nostrils should be titillated with a feather. Dry frictions should be made on the spine and on the soles of the feet; the other parts of the body may be rubbed with cloths wetted with warm whiskey or wine. An injection or clyster made stimulating by the addition of vinegar or table salt may also be administered, and lastly, a hot bath of about 100 degrees F. may be resorted to, but the child should be kept in it but a short time.

Much perseverance is necessary in using these several means. It is often only after several hours of assiduous care that the child is resuscitated, and it should be borne in mind that these means are frequently crowned with success.

APPENDIX.

I. REGIMEN OR HYGIENE OF PREGNANT FEMALES.

1. The pregnant female ought, as much as possible, to reside in dry and elevated localities, and to avoid places where epidemic diseases prevail. Abortion is sometimes produced by the paroxysm of an ague.

2. She ought to avoid air too cold or too warm; also, air charged with such odoriferous exhalations as may disturb the nervous system.

3. Her clothes, which ought to correspond with the weather, should not be so tight as to compress the chest or the abdomen; corsets, busks, bodices, &c., should be particularly guarded against.

4. Simple food, capable of being easily digested, is alone proper for her. It ought to be taken in small quantity, especially at the commencement of gestation, and her meals ought to be multiplied so as to afford sufficient nourishment, without overloading the stomach.

Heating aliments, liquors, strong coffee or tea, iced drinks, ought to be avoided. Cider, if the person be accustomed to it, and red wine, diluted with two-thirds of water, will be found the best drink when stimulating drinks are at all allowable for her.

Fasting should also be avoided by her. It was not without reason, that religion, ever wise and beneficent, dispensed with this class of females from the obligation of fasting.

5. Moderate exercise, regulated according to the strength and habit of the individual, will be found beneficial, if taken

morning and evening in the summer, and about mid-day in winter.

If, ordinarily, women living in the country bear with impunity the painful labours to which they are accustomed from their infancy, yet they should avoid them as much as possible.

The succussions or joltings from a badly suspended carriage or other vehicle, the efforts made in raising heavy burdens, dancing, riding on rough-going or scary horses, or at too rapid a gate or on too long a journey, are all to be equally avoided. They are especially to be avoided by the female who is subject to uterine hemorrhage (flooding,) or who has had already one or two abortions.

6. Cleanliness should be strictly attended to. Baths are useful for irritable, nervous females, subject to colics, convulsions, and who are pregnant for the first time. They are less proper for lymphatic women, or for those of lax fibre. In any case, they are not permissible until after the second month of gestation, or even then, if the woman be subject to uterine hemorrhages, or to miscarriages.

7. The female ought likewise to absent herself from shows, balls, large assemblies, and to avoid setting up late at night, gaming, and all causes of powerful emotions, excitation of the nervous system, and of prostration of the strength.

8. Loud noises, such as the firing of cannon, should, if possible, be avoided, as they have been known to cause miscarriage, even at a distance, as attested by Mr. Belinaye and Baron Percy.

9. Anger, and all the violent passions are frequent causes of abortion, and consequently should be guarded against. Persons ought also to use much reserve in the marriage act, especially during the first three months of gestation.

10. Blood-letting is a practice for which many teeming females have a strong prejudice, but which is not to be encouraged except under certain circumstances. The plethora and febrile excitement which are often present during pregnancy, are more rationally and safely kept down by using less nutritious and stimulating diet. Those persons should not resort to

blood-letting, especially from the feet, unless there be manifest indications for its employment—and in such cases it is advisable to consult a physician. “To bleed merely because pregnancy exists, is a practice which is sanctioned neither by reason nor experience, and ought to be discarded as a custom calculated to do mischief in some cases at least, whilst it cannot do any good unless called for by other circumstances than the condition merely of pregnancy.” (Eberle.)

11. When the menses have stopped, and there is any doubt that pregnancy may not have been the cause, the female should avoid all those means which are calculated to restore menstruation; especially she ought not to use those medicines said to be emmenagogue, such as Spanish flies, (*cantharides*,) ergot, (*secale cornutum*,) savin, (*sabina*,) pennyroyal, (*hedeoma*,) rosemary, (*rosmarinus*,) &c. Neither should she use these medicines when pregnancy is advanced.

12. As to the fantastic and irresistible “longings,” which the female will sometimes have, for certain kinds of food and drink, they ought to be respected and indulged, experience having proved that there is nothing detrimental in their moderate indulgence.

13. Experience has convinced us that the above hygienic rules are too seldom practiced. Hence the vast number of abortions, especially in the United States, where they are but little observed. We lately attended a case brought on by dancing. The patient aborted a four months fetus and lost about two gallons of blood, before we were summoned; and though she recovered, it is unnecessary to say that her life was in imminent danger. Physicians must meet with many such cases. We should charitably hope that these misfortunes proceed, in the vast majority of instances, from ignorance of their duty on the part of the females. Hence the friends of humanity and religion, especially physicians, accoucheurs and midwives, ought to avail themselves of suitable opportunities to instruct pregnant women in the duties they owe to the new being. Clergymen cannot be expected to give full expression to their charity in this respect, from the delicate nature of the subject.

It appears to us, that christian mothers ought to instruct their married daughters on these subjects, and particularly on the necessity, in cases of abortion or miscarriage, of baptizing the young being or fetus, in all the phases of its existence; that is, from the time of conception. (See Animation of the fetus.) Were this recommendation generally adopted, a few generations would establish this truly excellent and christian practice.

II. DISEASES OF PREGNANT WOMEN.

1. Whatever may be the reasons given for the infrequency of diseases in the teeming female, independent of those of pregnancy, one cannot avoid recognizing the existence of a Providence who watches over the preservation of the new human being, and preserves it from the destructive causes with which it is surrounded. Pre-existing diseases, such as phthisis, become arrested during pregnancy, and re-appear after accouchment; for this reason we should never abandon entirely their treatment. We ought, on the contrary, to continue the use of gentle means, which are not hurtful to the fetus.

2. In the treatment of dropsical cases, we should suspend the evacuant plan, because it is scarcely compatible with the preservation of the new being. If, however, the dropsy threatens suffocation, the operation of tapping should be resorted to. The life of the child is preserved by prolonging that of the mother.

3. Every formidable disease which has supervened during pregnancy threatening the life of the mother, and consequently that of her young offspring, ought to be combatted with rational means, which are rarely, if ever, destructive to the fetus. As to the diseases depending on the sympathetic influence which the uterus exercises on the other organs, if they resist means administered with reserve and caution, they are to be left to nature, until after the accouchment, because they seldom admit of cure before that event. Frequently they then disappear spontaneously, or yield to rational medication.

4. The plethora which results from the suppression of the menses and the disturbing influence exercised by the uterus on other organs, are commonly the causes of the diseases which accompany pregnancy.

These affections are, pains in the loins and groins; also, in the thighs and legs, in the hypogastrium, in the illiac and epigastric regions, in the teeth and in the breasts; depraved taste and loss of appetite, capricious appetite, nausea, vomiting, salivation, constipation, diarrhea, retention, or incontinence of urine, dysury, cough, spitting of blood, difficulty of breathing, palpitation, syncope; piles, varices, œdema of the lower extremities, dimness of sight, blindness, tinkling in the ears, deafness, headache, disturbed intellectual faculties, convulsions, epilepsy, apoplexy.

5. The *pains felt in the abdominal region*, whatever may be their seat, ought to be treated but by fomentations and emollient injections, which may be rendered gently anodyne by the addition of one or two poppy-heads. If the pains be severe and permanent, and give reason to fear abortion, it is necessary to have recourse to general or local bleeding, to emollient and anodine applications to the abdomen, and to emollient clysters.

6. *Pains in the stomach, loss of appetite, vomiting, depraved taste and fantastical appetite*, are evident signs of gastric irritation; but this irritation is not always inflammatory, and does not require anti-phlogistic regimen; it is more commonly nervous, when light bitters and anti-spasmodics will be found useful.

7. The *cough* is sometimes nervous, and in this case mild narcotics will be apt to succeed in calming it. If cough and spitting of blood accompany a bronchial catarrh, diluent drinks and the application of cups or of leeches to the chest will be found suitable: when these symptoms proceed from plethora, general bleeding will cause them to disappear, but the proper remedy would be a more spare diet.

8. *Dyspnœa*, or difficulty of breathing, united to a feeling of heat in the chest, commonly requires general blood-letting.

The same means succeeds in *palpitations* and in *syncope* when there exist signs of plethora.

9. *Constipation* or costiveness, when caused by the pressure of the uterus on the rectum, is to be removed by mild laxative enemata or by mechanical means, such as a scoop, *curette*, &c.

10. *Diarrhea* is treated according to the causes which have excited it: regulated diet and emollient injections ordinarily subdue it. When it is accompanied with tenesmus, bloody evacuations and fever, it constitutes a *Dysentery*, which may occasion abortion or premature labour: we must now have recourse to antiphlogestic diet, mucilaginous drinks, emollient injections, topical emollient applications, leeches or cups to the abdomen or to the anus, &c.

11. *Retention and incontinence of urine* proceed from displacement of the bladder by the uterus. Often in this case the assistance of the physician becomes necessary. But frequently patience is the only remedy for these inconveniences.

12. *Hemorrhoids* (piles) and *varices* are generally attributed to compression of the veins, and *œdema* is in the same manner attributed to compression of the lymphatics, but *œdema* may also be caused by irritation of the same vessels.

13. *Headache* is frequently an attendant of gestation and often requires for its removal general blood-letting or leeches to the temples, but this treatment would be injurious in some cases of headache.

14. *Apoplexy and convulsions* require general and local bleeding and revulsives, cold applications to the head, &c., but it is best to endeavor to *prevent* them by appropriate regimen, mental as well as bodily.

15. *Folly*, or perhaps more properly *monomania*, is sometimes an attendant of pregnancy, but then it is commonly only transient. Women in the state of gestation have been seen who conceived an implacable hatred against their husband or children, and who sought to kill them sometimes with the intention of eating their flesh. It need scarcely be added that

hey must be prevented from committing reprehensible or criminal acts.

III. TREATMENT OF DISEASES WHICH MAY SUPER- VENE ON OR PRECEDE PREGNANCY.

1. The expectant method advised by physicians who consider that pregnancy contra-indicates all energetic means in the treatment of the diseases which sometimes accompany this state, is not always without inconvenience and should not be too closely followed. Cases will occur in which we must act, and experience has demonstrated that we may with care use emetics, purgatives, mercurials, general blood-letting, baths, &c.

2. Guided by the spontaneous vomittings which frequently accompany pregnancy without producing abortion, physicians employ with prudence emetics when there is foulness in the stomach, and they generally give the preference to ipecacuana. But if we have to treat of a highly nervous female subject to abortions, we should be more circumspect. The same precautions are to be taken when purgatives are given to relieve loaded bowels: mild laxatives such as manna, castor oil, the neutral salts, are those to be preferred. Acrid purgatives by producing colics may induce abortion.

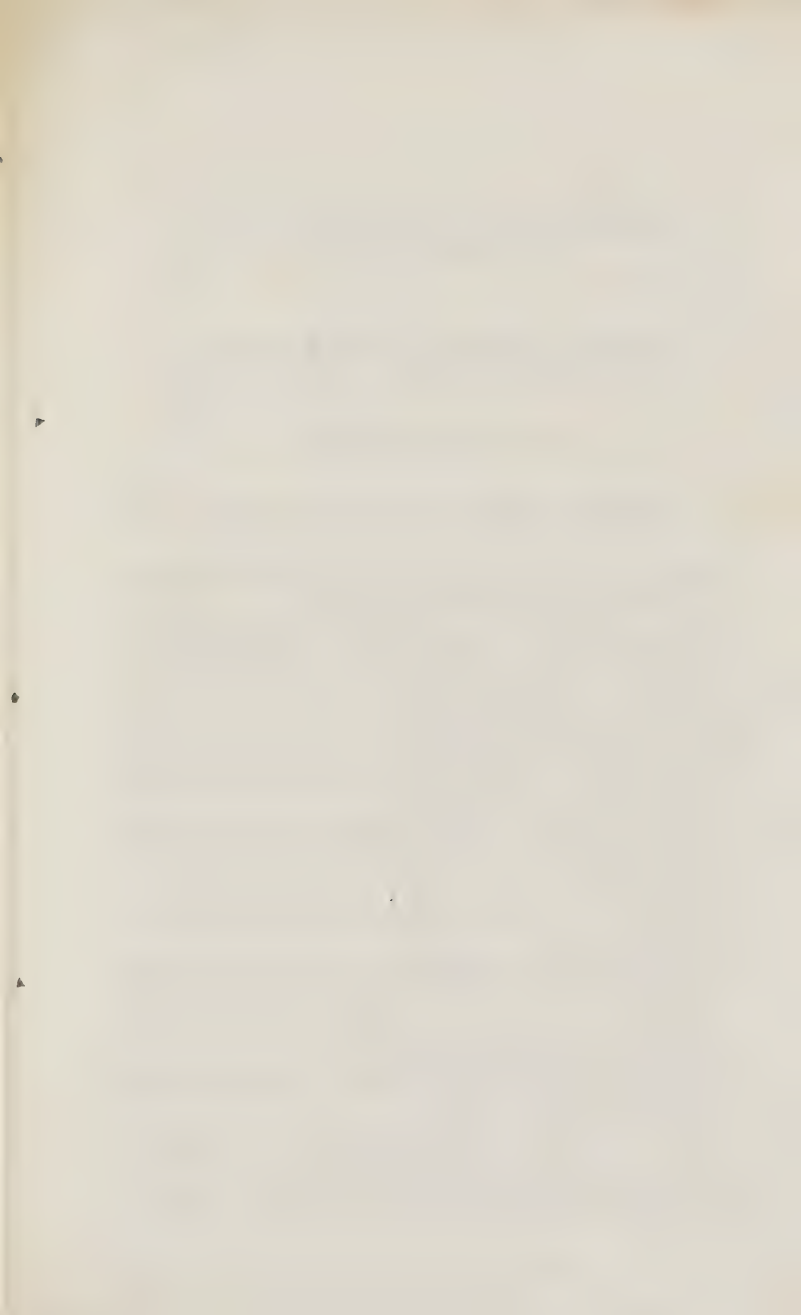
3. Syphilis progressing in pregnant women, often causes the death of the child and abortion. The child in more favorable cases is born in a state of marasmus which endangers its life. All these circumstances sanction the employment of mercurials against this malady even during gestation. But unless the case be urgent they ought not to be used during the first three or last two months. In the former case the mercury would infallibly aggravate the salivation, nausea, and vomittings, the diarrhea and colics, which so frequently accompany the beginning of pregnancy. In the latter case, or during the last two months of gestation, the salivation and diarrhea which are often produced by mercury would render the state of the woman after lying-in dangerous. But both in the one case and

the other we should not neglect palliatives, such as frictions with mercurial ointment in order to stay the progress of the evil.

4. Leeching may be practiced without inconvenience in inflammatory diseases supervening on pregnancy, and Hippocrates was not correct when he said: *Mulier utero gerens, vena secta, abortit.* We may have recourse to even bleeding in the foot in case of apoplexy or convulsions, because the child cannot be preserved but by saving the mother.

5. Both are sometimes indicated and cannot be objectionable in acute diseases.

5. Opium and other narcotics, whose effects are transitory, ought to be administered with circumspection.



GLOSSARY

OF TECHNICAL TERMS.

G. stands for Greek, L. for Latin, F. for French.

Abdomen, (L. *abdo* and *omentum*,) the belly, or that part of the body between the chest and the pelvis.

Abortion, (L. *aborior*,) 1. Miscarriage, or the expulsion of the fetus before the seventh month. 2. The fetus brought forth before it is completely formed.

Accouchment, (F.) lying in labor.

Acephalous, (G. *a* and *Kephale*,) headless, without a head.

Amenorrhea, (G. *a men* and *rheo*,) suppression of the menses from other causes than pregnancy.

Amnios, (G. *amnion*,) the soft internal membrane which surrounds the fetus. The fluid contained in it is called the *liquor amnii*.

Abnormal, (L. *ab* and *normalis*,) irregular, deviating from a rule or principle.

Antiphlogistic, (G. *anti* and *phlogo*,) a term applied to medicines and other means which oppose the progress of inflammation.

Ascites, (G. *askos*,) dropsy of the belly.

Asphyxia, (G. *a* and *sphuxis*,) suspension of the motions of the heart and arteries, fainting.

Ballottement, (F.) tossing the fetus by means of the finger.

Cerebral, pertaining to the *cerebrum* or brain.

Cervical, (L. *cervicalis*,) belonging to the neck or *cervix*.

Chronic, (F. *chronique*,) continuing a long time as a disease.

Congenital, (L. *congenitus*,) connate, begotten together, of the same birth.

Congestion, (L. *congestio*,) an accumulation of blood in a part.

Contra-indicate, to indicate some mode of cure contrary to that which the general tenor of the disease requires.

Diagnosis, (G. *diagnosis*,) the distinctive knowledge of a disease.

Diuretic (G. *diouretiks*) having the power to provoke the urine.

Dysury, (G. *dusouria*,) difficulty in discharging urine.

Emmenagogue, (G. *emmenos*,) a medicine that promotes the menstrual discharge.

Eviscerate, (L. *eviscero*,) to disembowel, to take out the viscera.

Fallopian tubes, two ducts arising from each side of the fundus of the womb.

Febrile, (L. *febrilis*,) pertaining to fever.

Gastric, (G. *gaster*,) belonging to the belly or the stomach.

Gastrotomy, (G. *gastro* and *temno*) the operation of opening the abdomen. *The Cæsarian section.

Gestation, (L. *gestatio*.) 1. The act of carrying young in the womb, pregnancy. 2. Exercise.

Hemorrhage, (G. *ghaimorrhagia*,) profuse bleeding.

Hypogastric, (G. *hupo* and *gaster*,) relating to the *hypogastrium*, or lower region of the belly.

Incontinence, (L. *incontinentia*.) 1. Want of restraint of the passions. 2. Inability of the animal organs to restrain discharges of their contents.

Insufilation, the act of breathing or blowing into.

Jugular, [L. *jugularis*,] pertaining to the neck or throat.

Larynx, [G. *larugx*,] the upper part of the wind-pipe or trachea.

Lesion, [L. *læso*,] a hurt, an injury.

Leucorrhea, [G. *lukos* and *reo*,] the whites, flour albus.

Lochia, [G. *locheuo*,] the cleansings. The discharge which follows delivery.

Lumbar, [L. *lumbalis*,] belonging to the loins.

Menorrhagia, [G. *menia* and *regnumi*] an immoderate flow of the menses.

Menses, [L. *mensis*,] the monthly sickness of females, the courses, flowers.

Menstruation, see menses.

Nævus, [L.] 'A spot or blemish.

Nævus maternus, a mother's mark.

Narcotics, [G. *narcoo*,] a medicine which stupifies or produces sleep,

Ovary, [L. *ovarium*,] the part of the female in which the ova are lodged.

Parietes, [L. *paries*,] sides of a cavity of the body.

Pediluvium, [L. *pes* and *lavo*,] a foot bath.

Parturition, [L. *parturio*,] the act of bringing forth; delivery.

Pelvis, [G. *pelus*,] the cavity below the belly.

Peritonium, G. *periteino*,] a strong membrane surrounding the contents of the abdomen.

Placenta, [G. *plakous*,] the after-birth. The substance that connects the fetus with the womb.

Prognosis, [G. *pro* and *genosko*,] the foretelling of the event of diseases from the symptoms.

Pubis, the part of the organs of generation which is covered with hair. *Os Pubis*. The share-bone.

Respirations, [L. *respiro*,] the act of breathing.

Sacrum, [L. *sacer*,] the posterior bone or part of the pelvis.

Stithscope, [G. *stethes* and *skopco*,] a tabular instrument for distinguishing sounds.

Sternum, [L.] the breast-bone.

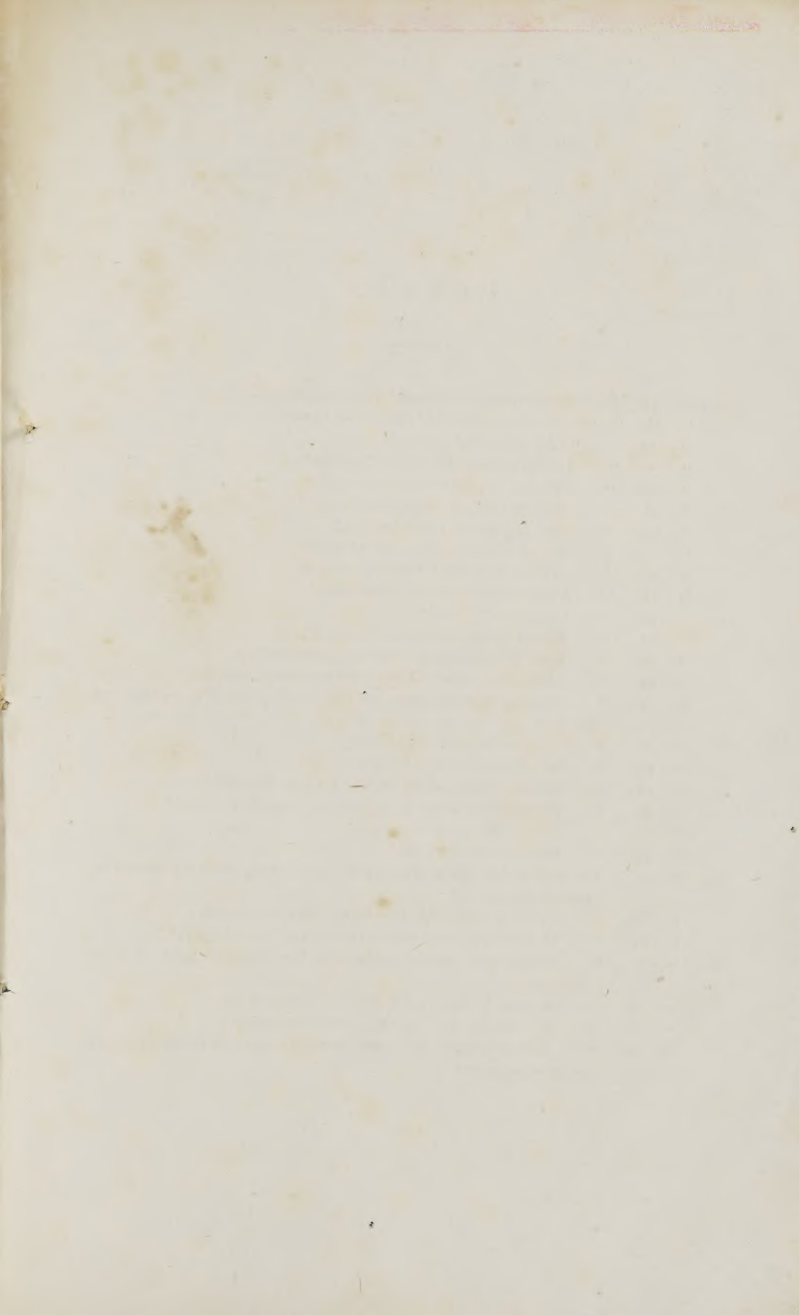
Sudorific, [L. *sudor* and *facio*,] a medicine which increases perspiration.

Symphysis, [G. *sun* and *phuo*,] mediate connexion; the union of bones by cartilage.

Thorax, [G. *thoreo*,] the chest.

Uterus, [L.] The womb, matrix.

Viscus, pl. *viscera*, an organ which has an appropriate use.



E R R A T A

Page 14, line, 9 from top—for 'precious,' read 'precocious.'

- " 17 " last, for 'in section 61,' read 'note, p. 49.'
- " 19 " for '*defauto*,' read '*defaults*.'
- " " " 4 from bottom, for '*chrise*,' '*chose*.'
- " 21 " 19 from top, for 'ville,' read 'villi.'
- " 26 " 13 from top, for 'cryst,' read 'cyst.'
- " 27 " last, for 'epoch,' read 'period.'
- " 29 " first, for 'abortions,' read 'abortion.'
- " " " 14 from top, after 'expose,' read 'it.'
- " 34 " 4 from bottom, for 'is,' read 'are.'
- " 40 " last, for '42,' read '49.'
- " 42 " 4 from bottom, omit 'hydrocephalic.'
- " 43 " 1, for 'puracentises,' read 'paracentises.'
- " 46 " 6 from top, after 'if,' read 'the fontenella or.'
- " 47 " 12 from bottom, after 'at all,' read (even of those that are
not fatal.)
- " " " " for 'extremely,' read 'very.'
- " 48 " last, for 'of it,' read 'to it.'
- " 49 " 5 from bottom, after 'death,' read 'of the soul.'
- " 50 " 19 from bottom, for 'practicians,' read 'practicers.'
- " 51 " 9 from top, omit 'or germs.'
- " 54 " last, for '42,' read '49.'
- " 56 " 6 from top, 'be the celebrated physicians,' read 'by this cele,
brated physician.'
- " 72 " 8 from bottom, for 'the theory,' read 'this theory.'
- " 75 " 14 from top, after 'ardor,' read (see chap. III.)
- " " " 18 from top, for 'the subjects of this treatise,' read 'unborn'
children.'
- " 76 " 10 from bottom, after 'private,' read 'or lay.'
- " 77 " 13 from top, for 'occasion,' read 'occasions.'
- " 78 " 4 from bottom, for 'faces,' read 'fauces,' and for 'mercosities,'
read 'muccosities'

